TEDAS

TDA 556413

KENWOOD
SERVICE MANUAL

KENWOOD SERVICE MANUAL

SECTION 1 A900 Series
SECTION 2 Mixer Attachments
SECTION 3
SECTION 4

This manual incorporates all information issued by the Technical Publications Department up to the date of compilation shown on the front cover.

Subsequent amendments should be listed below:

Date	Reference	Subject	Page amended

WARNINGS...
(1) ISOLATE THE APPLIANCE FROM THE SUPPLY BEFORE SERVICING
(2) MODELS FITTED WITH 3-CORE SUPPLY LEADS MUST BE EARTHED PROPERLY

All reasonable care has been taken to ensure that the information given in this publication is correct at the time of compilation. The Company's policy is one of product improvement and we therefore reserve the right to supply goods that differ from those illustrated or described.

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To ensure prompt supply of replacement parts it is **essential** to provide the following information:

1. **Model Number**
2. **Serial Number**
3. **TDA Part Number**
4. **Part Description**

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SECTION ONE

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NOTES ON USING THIS MANUAL

1. The metric system of measurement is used, with imperial equivalents where applicable.

2. All threads are right-handed unless specified otherwise.

3. All screws have recessed heads unless specified otherwise.

4. Items on the exploded drawings are representative of all models. Model variations of drawing items are given in the Parts Lists by description and application. They are identified by TDA numbers. If no variation is given that part applies to all models.

5. One '*' beside an item means that it is not illustrated, two '**' means the complete assembly is not illustrated.

6. Normal hand tools, a tachometer and a torque wrench are considered sufficient for all repairs and servicing.

7. Electrical testing requires an insulation tester working at 500v.d.c with a scale capable of reading between 1 Megohm and infinity. Also a continuity tester capable of reading between 0.1 ohms and ten ohms.

TECHNICAL SPECIFICATION

	A901	A901D	A901E	A902	A903	A907D
LENGTH	386 MM	386 MM	386 MM	381 MM	386 MM	390 MM
WIDTH	267 MM	267 MM	267 MM	267 MM	267 MM	270 MM
HEIGHT	302 MM	302 MM	302 MM	302 MM	302 MM	359 MM
WEIGHT	6.7 KG	6.7 KG	6.7 KG	6.8 KG	6.7 KG	8.05 KG
POWER	450W	450W	375W	375W	375W	450W
SPEED AT MINIMUM	64 ± 4 r.p.m.	44 ± 4 r.p.m.	44 ± 4 r.p.m.	44 ± 4 r.p.m.	44 ± 4 r.p.m.	44 ± 4 r.p.m.
SPEED AT MAXIMUM	180 r.p.m.	180 r.p.m.	180 r.p.m.	180 r.p.m.	180 r.p.m.	180 r.p.m.
SPEED CONTROL METHOD	GOVERNOR OR MAGNETIC	MAGNETIC	MAGNETIC	MAGNETIC	MAGNETIC	MAGNETIC

NOTE: 1. ALL MODELS ARE AVAILABLE IN BOTH HIGH (200 - 240V) AND LOW (100 - 120V) VOLT VERSIONS.
2. WITH A901 GOVERNOR CONTROL IS REPLACED BY MAGNETIC CONTROL ON REPAIR. SLOW SPEED IS THEN 44 ± 4 r.p.m.

ABBREVIATIONS	MEANINGS	ABBREVIATIONS	MEANINGS
'AB'	SELF TAPPING SCREW POINT	HD	HEAD
'B'	SELF TAPPING SCREW POINT	HEX	HEXAGONAL
'U'	SELF TAPPING SCREW POINT	IT	ITEM
'Y'	SELF TAPPING SCREW POINT	IWF	IN WOUND FIELD
/JU	ZINC PLATED AND PASSIVATED	L/H	LEFT HAND
/M	PHOSPHATED BLUED	LIQ	LIQUIDISER
/Q	DULL CHROME	MUSH	MUSHROOM HEAD
/T	BRIGHT NICKEL	PKD	PACKED
/W	CHROME ON NICKEL	PROD	PRODUCTION
ARM	ARMATURE	R/H	RIGHT HAND
ASSY	ASSEMBLY	RD	RED
BN	BROWN	REC	RECESSED
BRG	BEARING	RND	ROUND
CM	BEIGE	S/	STEEL
COV	COVER	SCR	SCREW
CSK	COUNTERSUNK	SR	SILVER
DR'LD	DRILLED	SS/-	STAINLESS STEEL
EXT	EXTRACTOR	TPK	PACK OF TEN ITEMS
FIG.	FIGURE	WE	WHITE
		YW	YELLOW

THE DATE CODE

The date code consists of one digit and one letter. The digit is the last number of the year of manufacture and the letter indicates the month in accordance with the following table.

JANUARY	A	MAY	F	SEPTEMBER	L
FEBRUARY	B	JUNE	H	OCTOBER	M
MARCH	C	JULY	J	NOVEMBER	N
APRIL	D	AUGUST	K	DECEMBER	S

Example: N8 = November 1978

To determine in which particular 10 year period an appliance was made it will be necessary to ask the customer when it was bought or look for signs of wear, age etc..

CIRCUIT DESCRIPTION Fig.1

1. Triac CSR 1 is a full wave semi-conductor switch which conducts when a voltage is applied to its gate. When the appliance is switched off the mechanically operated governor contacts are closed, connecting CSR1 gate to R1 via R2. Thus, when the appliance is switched on, a voltage appears at the gate of CSR1 which then conducts to energise the motor.

2. The governor contacts are mounted on the contact bar assembly whose distance from the governor is determined by the speed control setting. An increase in speed setting causes the contact bar to move further from the governor thereby requiring a higher motor speed to cause the contacts to be opened.

3. When the motor has reached a speed relative to the knob setting, the governor causes the contacts to open, CSR 1 switches off and the motor is de-energised. The motor slows down until the governor contacts close, when the motor circuit is again completed. This hunting cycle is continuously repeated to give an average motor speed corresponding to the control knob setting.

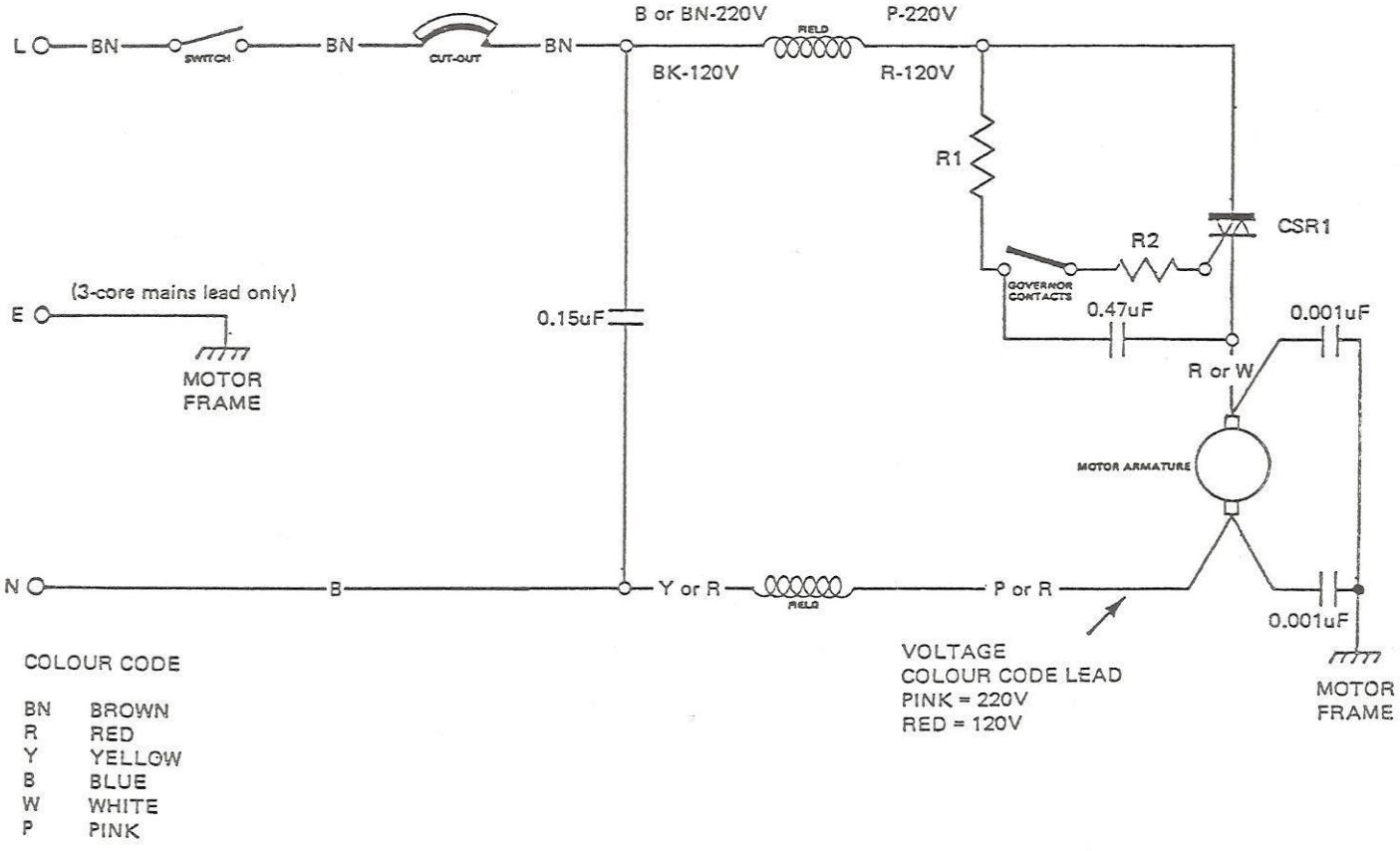


Fig.1 Wiring diagram (governor control)

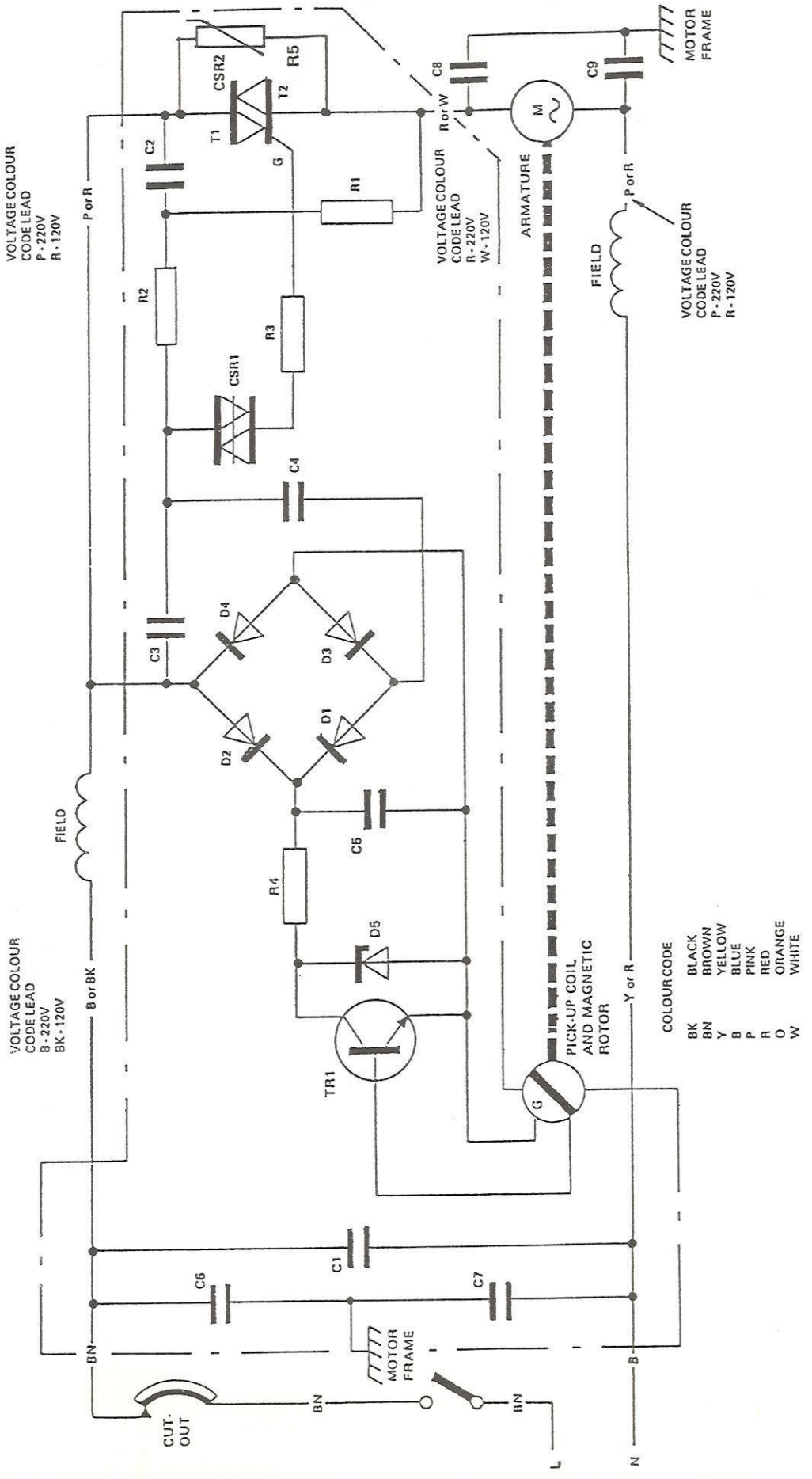


Fig.2 Wiring diagram (magnetic control)

CIRCUIT DESCRIPTION Fig.2

INTRODUCTION

4. The wiring diagram (fig.2) is considered in this description as two separate functions. The diagram is thus divided into a trigger circuit (fig.2B) and a control circuit (fig.2C).

OPERATION

Trigger circuit

5. The mains supply frequency is 50Hz and thus one complete cycle lasts for a period of 20 milliseconds (1/50 sec=0.02 sec) and one half cycle a period of 10 milliseconds (fig.2A).

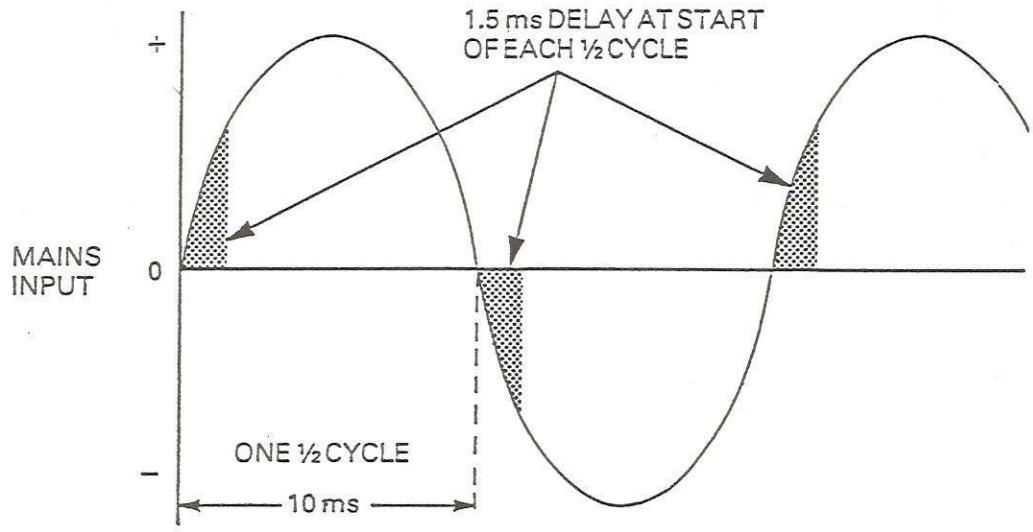


Fig.2A Mains periodicity showing delays

6. The time to reach diac breakover of C3.R2 is 1.5ms which determines a fixed delay at the start of each half cycle as shown in Fig.2A. Both positive and negative-going half cycles charge up C3 through R2 (fig2B). When the volts drop across C3 reaches 27V, diac CSR 1 conducts to discharge C3 to triac CSR 2 gate via R3. Thus a triac triggering pulse is provided. The triac is latched in the conduction state by a charging current from C2. Mains neutral is always connected to the motor and line is connected while the triac is in a state of conduction. The motor now runs up to full speed and the line input is applied during the latter 8.5ms of each half cycle of input voltage.

7. Resistor R1 provides current limitation to the stored charge on capacitor C2 during switch on. It also provides protection against high voltage transients while the appliance is running.

8. Resistor R3 is a current limiting resistor which ensures that the current to CSR 2 gate does not exceed a specified value. Additionally, it provides the necessary pulse length by the time constant C3.R3.

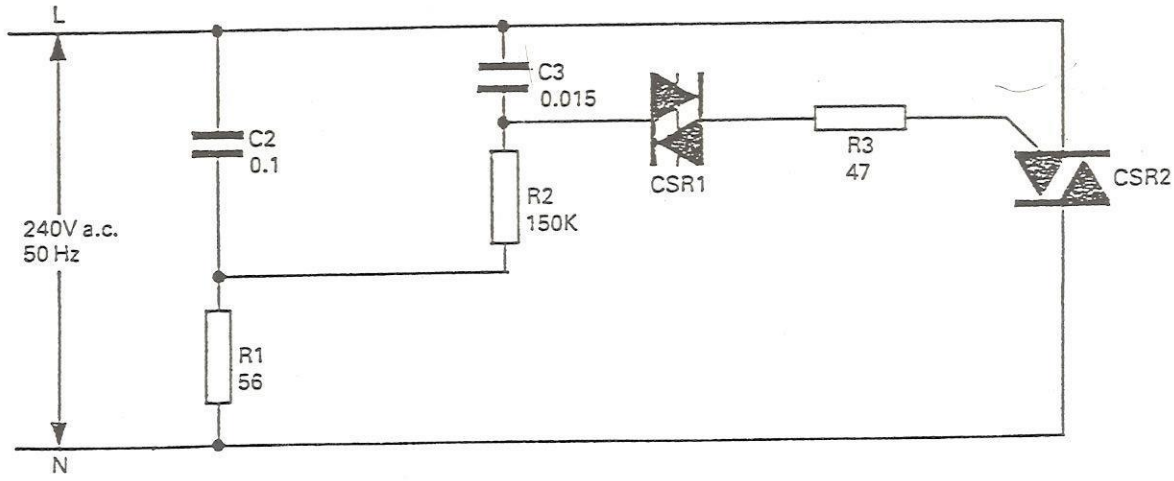


Fig.2B The trigger function

CONTROL CIRCUIT

9. The simplified circuit of fig.2C shows how the speed control function is achieved.

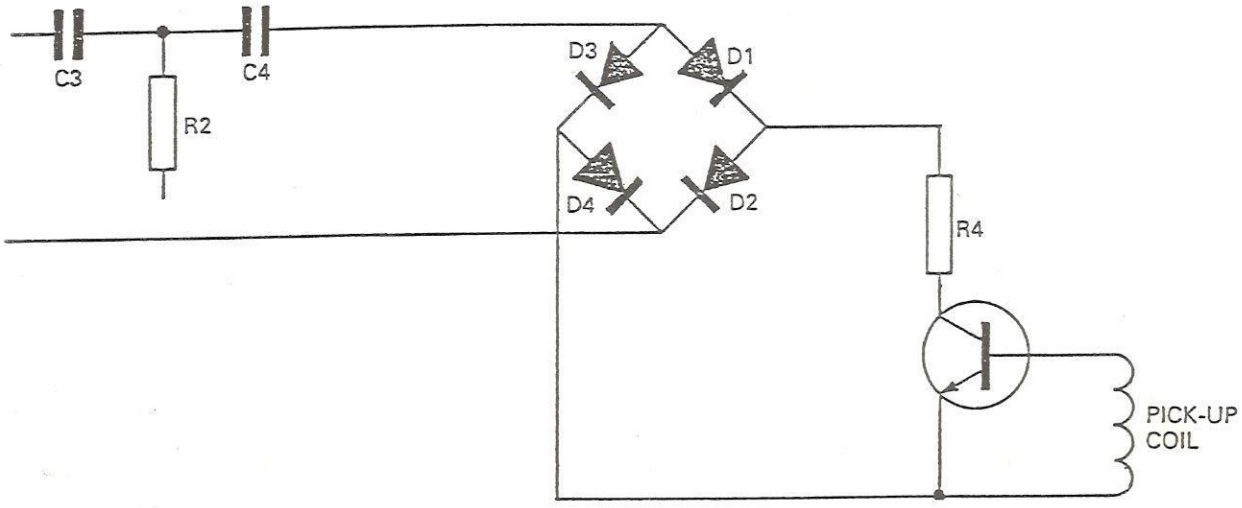


Fig 2C The control function

10. At the end of the 1.5ms delay (fig2A), there is a period of 8.5ms in each half cycle during which the triac is conducting and the motor is running at maximum speed. If, however, the time constant of C3.R3 were to be increased beyond 1.5ms, there would be less of each half cycle left for triac conduction and the motor would run slower. To achieve this control of slowing the motor speed from maximum the current flowing into C3 during charge time is reduced thus ensuring that C3 takes a longer time in charging up to 27V. To regulate C3 current, the circuit of fig.2C is used.

11. The voltage induced in the pick up coil depends on two factors:

a) the speed of the motor,
b) the distance between the motor driven magnet and the coil.

12. The distance between magnet and coil is determined by the user's speed selection. When maximum speed is selected, the magnet is at its maximum distance from the coil and a voltage less than that required for transisor switching is induced in the coil. Thus the transistor does not conduct, there is no current through R4 from the bridge rectifier and no current flows through the dc blocking capacitor C4 from the mains supply. The time constant of C3.R2 is 1.5ms leaving 8.5ms of each cycle for triac conduction and the motor runs at maximum speed.

13. However, if a lower speed is selected, the magnet and pick-up coil are brought into closer proximity and a voltage may now be induced into the pick-up coil. When the voltage is not less than 0.6V the transistor conducts to place a load across the bridge rectifier.

14. Current flows through C4 as the mains supply is rectified. As the speed control is set between maximum and minimum, more or less current flows through C4 affecting the current through C3 and thus the time constant C3.R2. The triac conducting time varies according to the speed selection and thus the speed of the motor varies in sympathy. The lower the speed selected, the greater the damping effect of the transistor on the circuit,the longer it takes to charge C3 up to 27V and the slower the motor speed and vice versa.

15. The distance between the magnet and the pick-up coil has the main effect on motor speed. However, there is a self-compensating effect which helps maintain motor speed constant at the selected setting. If motor speed should increase although the setting is not altered, more current will be taken by C4 as the dampening effect of the transistor increases, thus reducing motor speed to that consistent with the setting. The converse also applies when motor speed drops although the setting is not altered, until the limitations of motor torque come into effect.

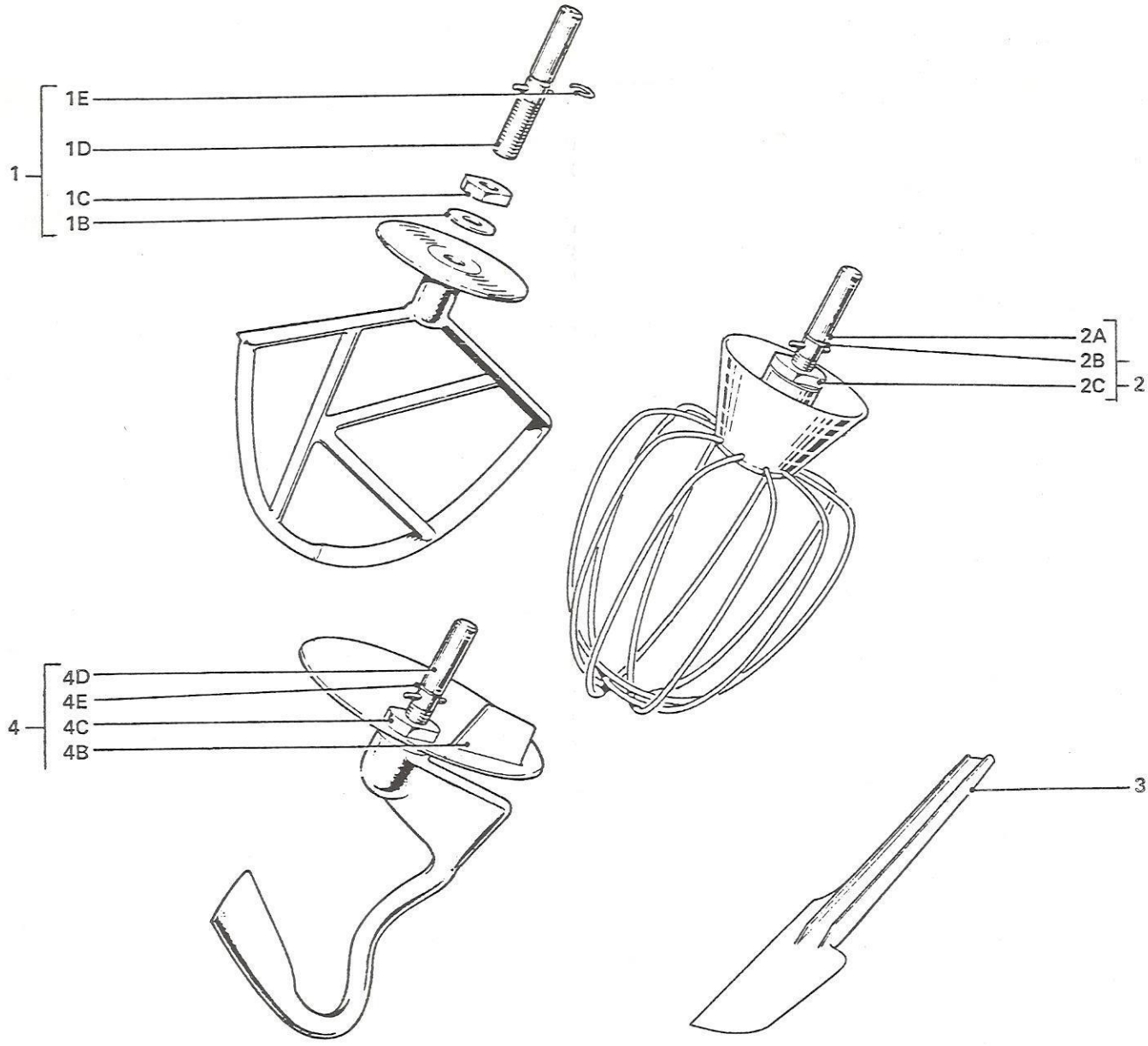


Fig.3 Whisk, beater, etc..

A901 CHEF

1	182781	K BEATER ASSY
1B	204357	WASHER S/O TPK
1C/2C/4C	177578	LOCKNUT
1D/2A/4D	182779	BEATER SHAFT ASSY (INCLUDES 1E)
1E/2B/4E	182767	CIRCLIP, BEATER SHAFT
2	353677	WHISK ASSY
3	375948	SPATULA
4	186701	DOUGH HOOK ASSY
4B	186610	SHIELD

A907 MAJOR

1	434756	K BEATER ASSY
1B	204357	WASHER
1C/2C/4C	434823	LOCKNUT, BEATER
1D/2A/4D	434744	BEATER SHAFT ASSY INCLUDES 1E
1E/2B/4E	437904	CIRCLIP, BEATER SHAFT
2	434809	WHISK ASSY
3	375948	SPATULA
4	434770	DOUGH HOOK ASSY
4C	434794	SHIELD

MAIN BODY ASSEMBLY

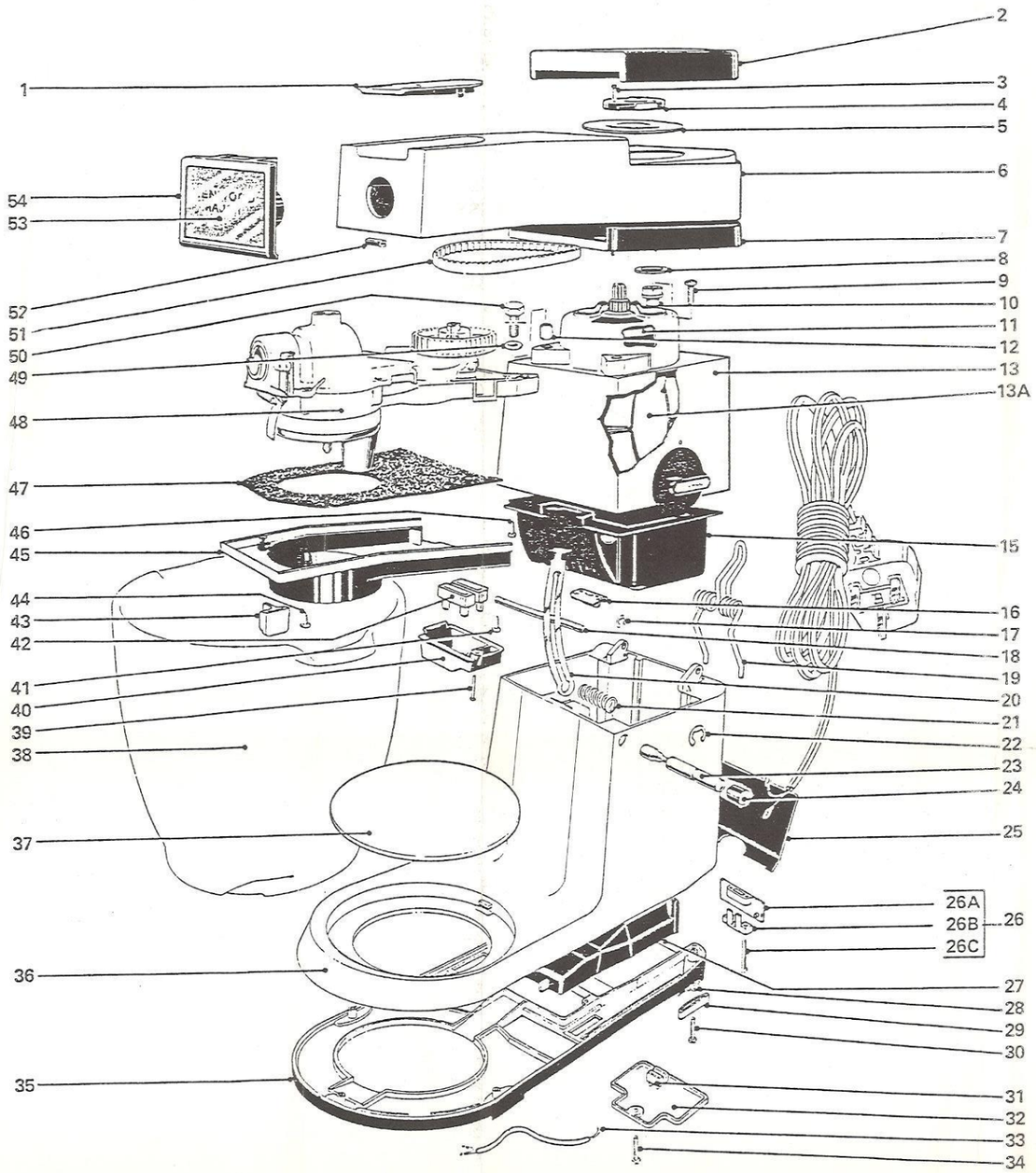


Fig. 4

Main Body Assembly

*		494562	PLUG, JUICE EXTRACTOR OUTLET
*		401864	PAD (TOP COVER SUPPORT)
1		553916	JUICE EXT.O'LET CVR, DOVE GREY
		353548	JUICE EXT, OUTLET COV, BLACK
		489919	JUICE EXT, OUTLET COV, SILVER
		366193	JUICE EXT, OUTLET COV, BROWN
		600422	JUICE EXT, OUTLET COV, A902 GREY
2		553904	LIQ, OUTLET COVER WHITE
		489907	LIQ, OUTLET COVER SILVER
		353744	LIQ, OUTLET COVER BLACK
		366246	LIQ, OUTLET COVER BROWN
		600434	LIQ, OUTLET COVER BROWN
03		371227	SCREW, PAN REC M3,5X25 S/W TPK
04		353768	SPIGOT
05		353770	SPIGOT SEAT PLATE
06	#	390493	TOP COVER METAL RED
		489921	TOP COVER (A902) WHITE
		353706	TOP COVER PLASTIC WHITE
		366222	TOP COVER PLASTIC YELLOW
	#	366210	TOP COVER PLASTIC RED
		432344	TOP COVER PLASTIC BEIGE
		390479	TOP COVER METAL WHITE
	#	390481	TOP COVER METAL YELLOW
		432356	TOP COVER METAL BEIGE
07		553980	BODY UPPER TRIM, DOVE GREY
	#	353756	BODY UPPER TRIM BLACK
		428549	BODY UPPER TRIM BROWN
08		353718	WASHER (SMALL PULLEY)
09		353627	SCREW, PAN REC M5X20 S/JU
10		353811	MOTOR MOUNTING, ADJUSTING BUSH
11		353823	MOTOR MOUNTING RING
12		353586	GEARBOX DOWEL TUBE
13		353471	BODY ASSY, WHITE
		370338	BODY ASSY, YELLOW
		432368	BODY ASSY, BEIGE
	#	370340	BODY ASSY, RED
13A			MOTOR CONTROLLER SEE PAGE 12,D7
15		353550	BODY COVER ASSY
16		353835	QUADRANT BRACKET
17		198508	CIRCLIP (HINGE PIN)

MAIN BODY ASSEMBLY

18		353691	HINGE PIN
19		353720	COUNTER BALANCE SPRING
20		353847	QUADRANT
21		177554	CATCH SPRING
22		198493	CIRCLIP (CATCH PIN)
23		353794	CATCH PIN
24		553930	CATCH PIN BUTTON ASSY, BURGUNDY
		489866	CATCH PIN BUTTON ASSY, BROWN
		353562	CATCH PIN BUTTON ASSY, BLACK
		366208	CATCH PIN BUTTON ASSY, BROWN
25		435102	REAR COVER (A907) BROWN
		600343	REAR COVER GREY
26		357271	CORD CLAMP ASSY
26A		353536	CLAMP UPPER ASSY
		491895	CORD CLAMP UPPER (A903) (A907)
26B		343983	CLAMP
26C	#	353665	SCREW, PAN M3X25 S/T TPK
	#	491900	SCREW, PAN NO 6X25 'B' S/JU
27		434964	CORD COVER (A907)
		600381	CORD COVER GREY
28		434938	FOOT PLATE (A907)
29		434926	FOOT (A907)
		199411	FOOT
30		434976	SCR.PAN,M3.5 X 20 (A907)
		353495	SCREW,RND NO2X9.5 'U'S/- TPK
31		239168	TERMINAL BLOCK 2 WAY
32		353574	TERMINAL COVER (A907) INNER
		601139	TERMINAL COVER OUTER GREY
33		N.L.A.	FLEX CORD
34		434976	SCR, PAN M3.5 X 20 (A907)
35		434914	PLINTH(A907)
		600393	PLINTH GREY
36		434990	PEDESTAL PKD.(A907),WHITE
		435009	PEDESTAL PKD.(A907),BEIGE
	#	437942	PEDESTAL PKD,(A907),YELLOW
		N.L.A.	PEDESTAL ASSY,RED
		353483	PEDESTAL ASSY WHITE
	#	395443	PEDESTAL ASSY YELLOW
		432370	PEDESTAL ASSY BEIGE
37		456912	BOWL MOUNTING PAD(A907)
		417239	BOWL MOUNTING PAD
38		412095	MIXING BOWL KENLYTE (A907)
		343268	MIXING BOWL SS/-(A907)
		489969	BOWL, PACKED (A902) (A903)
		265026	MIXING BOWL, POLYPROPYLENE (PACKED)
		343270	MIXING BOWL,SS/- (PACKED)
39	#	353639	SCREW, PAN M4 X 20 S/W
40		353574	TERMINAL COVER
41	#	357312	SCREW PAN REC NO4X19 'B' S/JU TPK
42		239168	TERMINAL BLOCK 2 WAY
43		553942	KNOB,SS ATTACHMENT, BURGUNDY
		366260	KNOB (SLOW SPEED ATTACHMENT)
		489878	KNOB SLOW SPEED ATTACHMENT (A902)

MAIN BODY ASSEMBLY

44		353615	SCREW, PAN REC NO4X16 'B'S/W TPK
45		553928	GEARRBOX COVER LOWER DOVE GREY
		562943	GEARBOX COVER LOWER,BURGUNDY
		353732	GEARBOX COVER, LOWER, BLACK
		366234	GEARBOX COVER,LOWER,BROWN
46		353160	SCREW,PAN REC NO 8X13 'B' S/JU
		201393	SCR, PAN NO 8X13S/W'Y' TPK (A903) (A907)
47		353598	FELT, GEARBOX LOWER COVER
48		437899	GEARBOX ASSY. MAJOR
		434897	GEARBOX (SERVICE) ASSY. MAJOR
		494536	GEARBOX ASSY. CHEF
		494548	GEARBOX (SERVICE) ASSY. CHEF
49	#	428575	WASHER,M6
50		353641	BOLT, HEX M6 X 40
51		197944	TIMING BELT
52		401864	PAD (A907)
53		434861	NAMEPLATE, "KENWOOD MAJOR"
		565842	SS NAMEPLATE "KENWOOD CHEF" GREY
		568181	NAMEPLATE, "KENWOOD MAJOR" GREY
		353512	NAMEPLATE,"KENWOOD CHEF"
	#	457423	NAMEPLATE,"KENMIX CHEF"
	#	533198	NAMEPLATE,"KENWOOD CHEF BRIMAG"
54		434859	SS O'LET CVR "KENWOOD MAJOR"
	#	442820	SS OUTLET C'VR, BROWN
	#	353524	SS OUTLET C'VR, NO N'PLATE, BLACK
		565830	SS OUTLET COVER ASSY,CHEF GREY
		568179	SS O'LET CVR, MAJOR GREY
		353500	SS O'LET CVR. BLACK "KENWOOD CHEF"
		373029	SS O'LET CVR, BROWN "KENWOOD CHEF"
	#	457411	SS O'LET CVR, BROWN "KENMIX CHEF"
		489957	SS O'LET CVR "KENWOOD CHEF EXCEL"
	#	533186	SS O'LET CVR."KENWOOD CHEF BRIMAG"
		600410	SS O'LET CVR. GREY A902

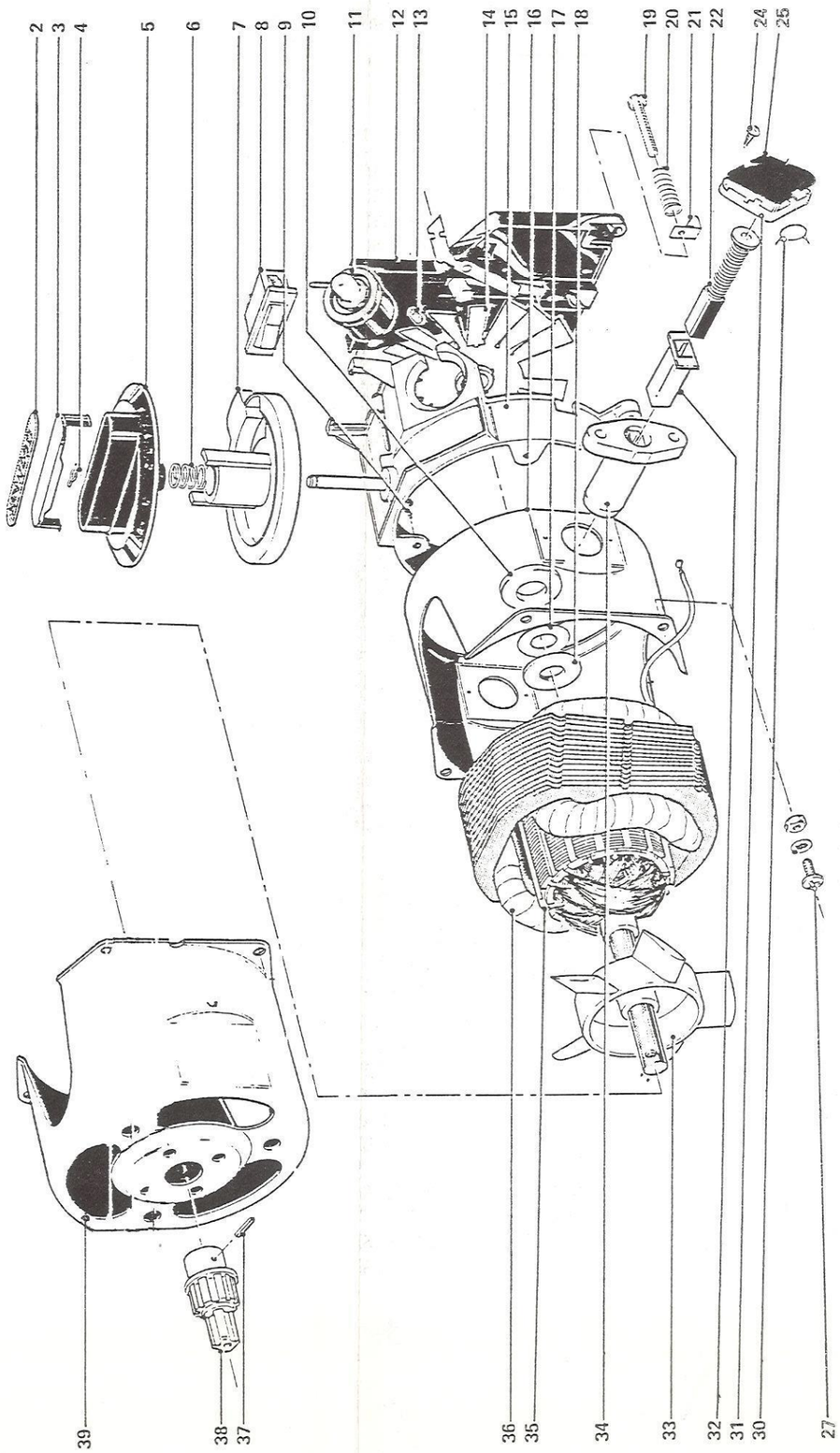


Fig. 5 Motor controller assembly

MOTOR CONTROLLER ASSEMBLY

	*	353354	MOTOR ASSY 220V (GOVERNOR CONTROL)
	*	435023	MOTOR ASSY 220V (MAGNETIC CONTROL)
	*	370950	MOTOR ASSY 120V (GOVERNOR CONTROL)
	*	428678	MOTOR ASSY (MAGNETIC CONTROL 120V)
	*	353469	MOTOR CONTROLLER ASSY 220/240V (GOVERNOR CONTROL)
	*	460664	MOTOR CONTROLLER ASSY 120V (GOVERNOR CONTROL)
	*	434873	MOTOR CONTROLLER ASSY (MAGNETIC CONTROL 220/240)
1	#	428587	SIDE CHEEK
2		353043	NAME, CONTROL KNOB, "KENWOOD"
		601141	NAME, CONTROL KNOB, (RED K)
	#	442868	NAME, CONTROL KNOB, "KENWOOD"
3		562955	INSERT, CONTROL KNOB, BURGUNDY
		533227	INSERT, CONTROL KNOB, BROWN
		353031	INSERT, CONTROL KNOB, BLACK
4		198584	CIRCLIP
5		491716	CONTROL KNOB, PRINTED BROWN
		491704	CONTROL KNOB, PRINTED BLACK
		553954	CONTROL KNOB, PRINTED BURGUNDY
		483757	CONTROL KNOB, BRAILLE
		489933	CONTROL KNOB ASSY (A902) BROWN
		562967	CONTROL KNOB ASSY (A902) BURGUNDY
6		177724	SPRING, CAM FRICTION
7		491728	SPEED CONTROL CAM
8		352984	SWITCH ON-OFF
		457459	SWITCH N AMERICA
9		332958	SCREW PAN REC NO 4X8 'B'S/W TPK
10		204632	PACKING WASHER TPK
11		435047	CUT-OUT 220/240V
		404165	CUT OUT 120V
12		352972	CONTACT BAR ASSY COMPLETE 220/240V
		370962	CONTACT BAR ASSY COMPLETE 120V
		494500	PCB ASSY 120V
		414639	PCB ASSY 220/240V
	*	435035	CONTROL BAR ASSY + PCB 220/240V
	*	457497	CONTROL BAR ASSY + PCB 120V
13	#	353108	SCREW GRUB M8 X 5 S/M
14		353093	FAN & GOVERNOR ASSY
14A		428604	FAN & MAGNET ASSY (MAGNETIC CONTROL)
15		353079	CONTROLLER HOUSING ASSY
16		353330	COMMUTATOR END FRAME ASSY
		601177	COMMUTATOR END FRAME ASSY
17		204632	PACKING WASHER TPK
18		204620	SHIM WASHER TPK
19		353055	SCREW PAN, HEX M4 X 35S/-

MOTOR CONTROLLER ASSEMBLY

20		177712	CONTACT ADJUSTING SPRING
21		343567	LOCKING CLIP
22		353328	BRUSH ASSY 220/240V
		457461	BRUSH ASSY 120V
23	#	353275	SOLDER TAG
24		239118	SCREW, PAN REC NO 4X16 'B'S/JU TPK
25		353263	CAPACITOR COVER
26	#	357207	BRUSH CONNECTOR
27		458192	SCREW, PAN REC M4 X 8 S/JU
30		338421	CAPACITOR 0.001MF
31	#	353251	BRUSH BOX COVER
32		171407	BRUSH GUIDE 120V ONLY
33		362484	FAN
34		353249	BRUSH BOX 220/240V
		428628	BRUSH BOX 120V
35		448343	DR'LD ARM ASSY 220/240V (MAGNETIC CONTROL)
		448355	DR'LD ARM ASSY 120V (MAGNETIC CONTROL)
		553978	WOUND ARM ASSY FOR I.W.F.
		448305	DRILLED ARMATURE ASSY 220/240V
		448331	DRILLED ARMATURE ASSY 120V
36		553966	WOUND FIELD ASSY I.W.F.
		353304	WOUND FIELD ASSY 220/240V
		371007	WOUND FIELD ASSY 120V
37		462466	TENSION PIN
38		353017	SMALL PULLEY
39		353316	DRIVE END FRAME ASSY
		601153	DRIVE END FRAME ASSY I.W.F.

353354
435023 *
428678

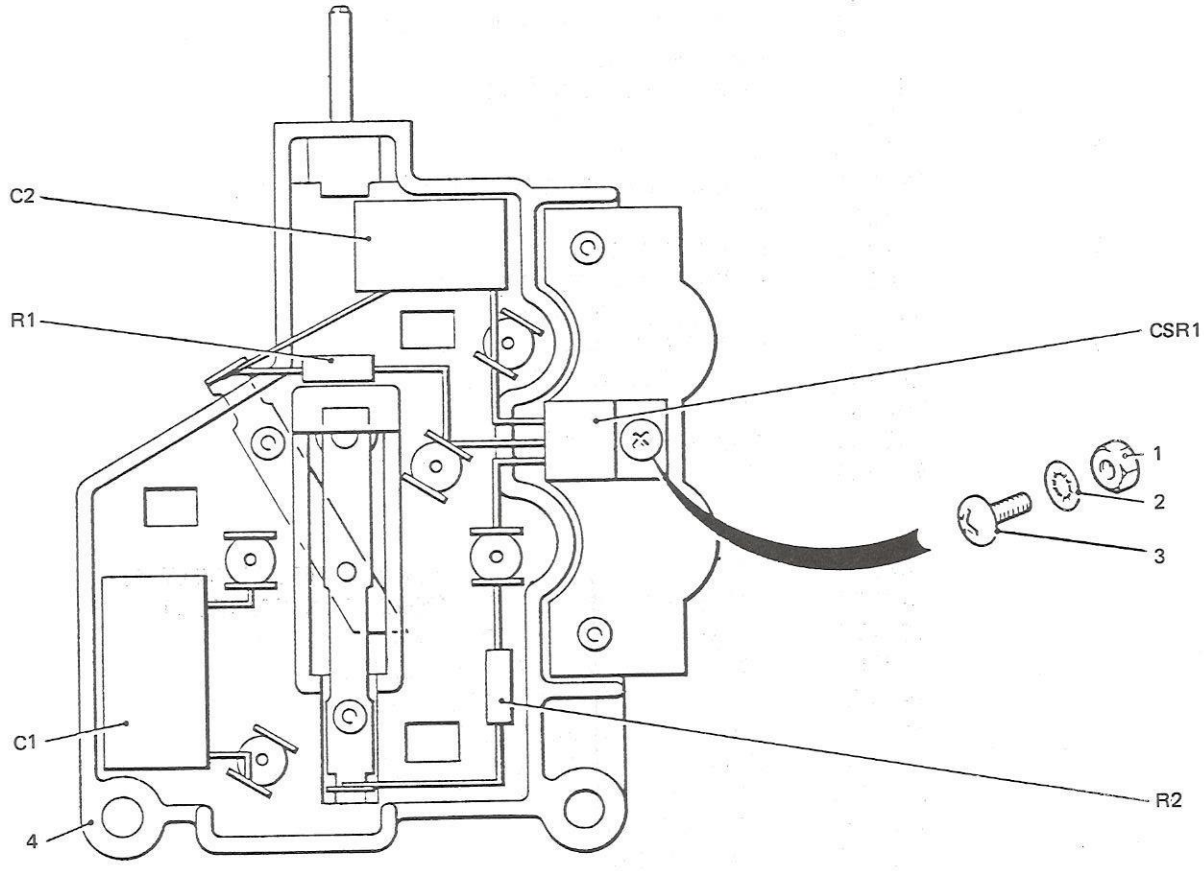
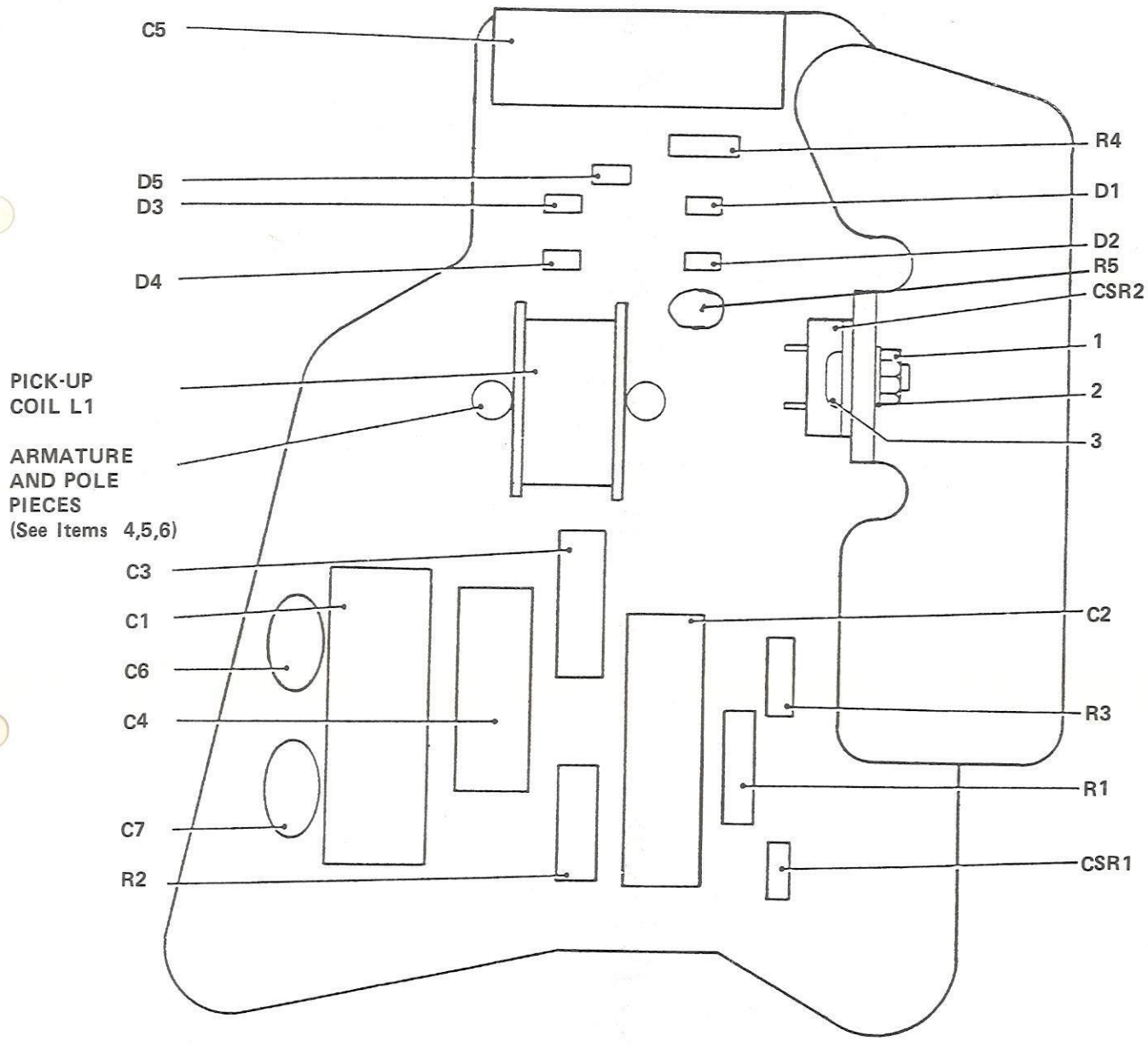


Fig. 6 Control bar assembly

1	372051	NUT M3
2	203810	WASHER, SHAKEPROOF 6BA
3	353419	SCREW, PAN REC M3 X 8
4	353457	CONTACT BAR ASSY, LESS COMPONENTS
C1	353380	CAPACITOR 0.15MF
C2	338433	CAPACITOR 0.047 MF
CSR1	353445	TRIAC FORMED 220V TYPES
	371021	TRIAC FORMED 120V TYPES
R1	436584	RESISTOR 56 OHM 0.5W
R2	402961	RESISTOR 220 OHM 220V
	426826	RESISTOR 120 OHM 120V



PCB Assembly Fig.7

PCB ASSEMBLY FIG 7

1		372051	NUT M3 STEEL
2	#	353421	LOCK WASHER M3
3	#	353419	SCREW, PAN REC M3 X 8
4		414598	PICK UP COIL ARMATURE
5		414603	POLE PIECE
6	#	414615	SCREW, PAN M2 X 5
C1		353380	CAPACITOR 0.15MF
C2		284826	CAPACITOR 0.1MF
C3		414653	CAPACITOR 0.015MF
C4		414677	CAPACITOR 0.47MF
C5		414706	CAPACITOR 2.2MF
		436845	CAPACITOR 1.0MF (120V MODEL)
C6/7		338421	CAPACITOR 0.001MF
CSR1		262024	DIAC
CSR2		435114	TRIAC
		428733	TRIAC 120V MODEL
D/1/2/3/4		414756	DIODE
D5		428680	ZENER DIODE
L1		414811	PICK UP COIL ASSY
R1		436584	RESISTOR 56 OHM 0.5W
R2		414770	RESISTOR 150K 0.5W/0.33W 220/240V
		428707	RESISTOR 47K 120V
R3		428719	RESISTOR 68 OHM 0.25W
R4		414794	RESISTOR 1.2K 0.25W 220/240V
		428721	RESISTOR 750 OHM 120V
R5		472629	VOLTAGE DEPENDANT RESISTOR 220/240V
		473879	VOLTAGE DEPENDANT RESISTOR 120V

353548 (2)

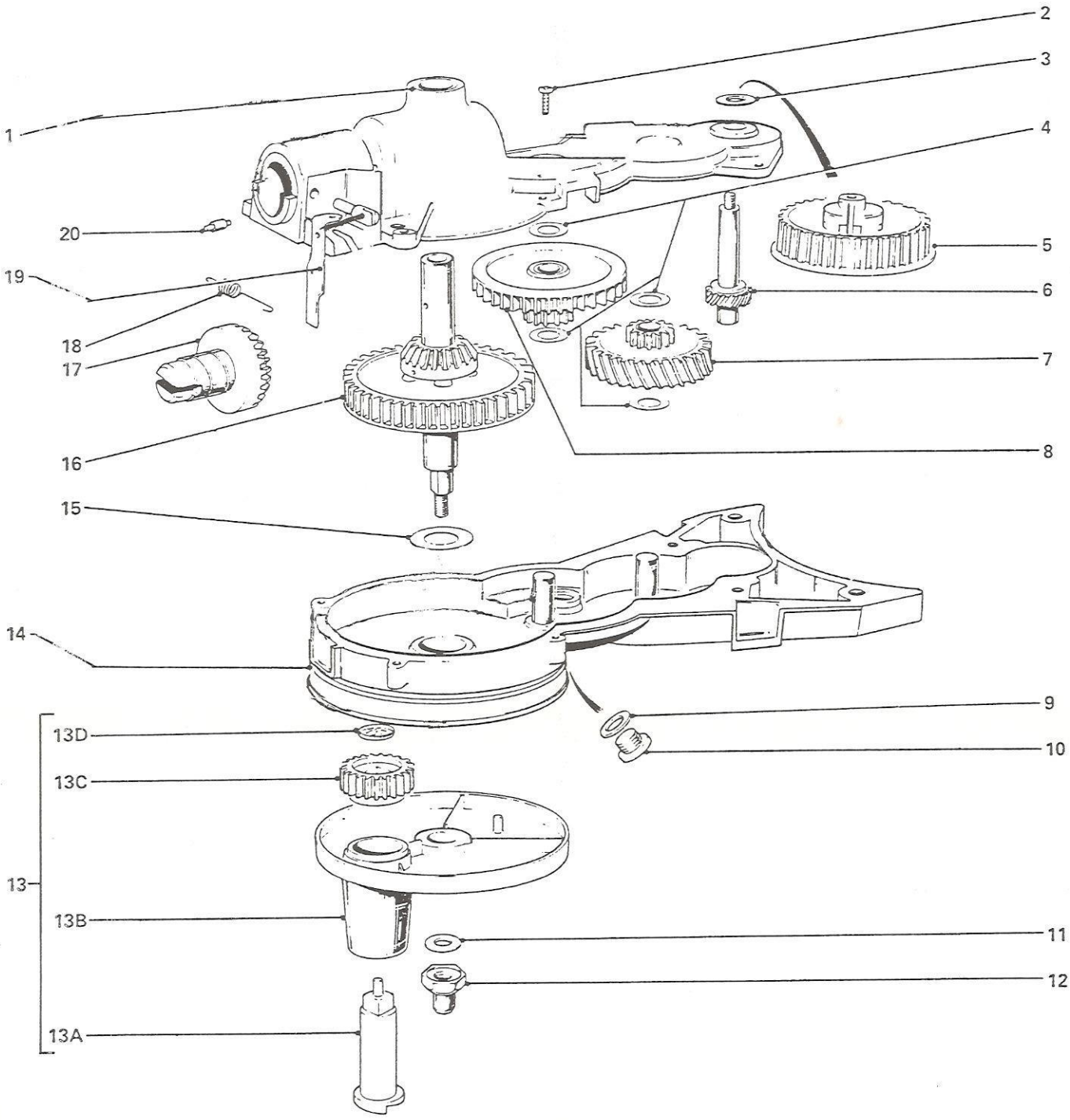
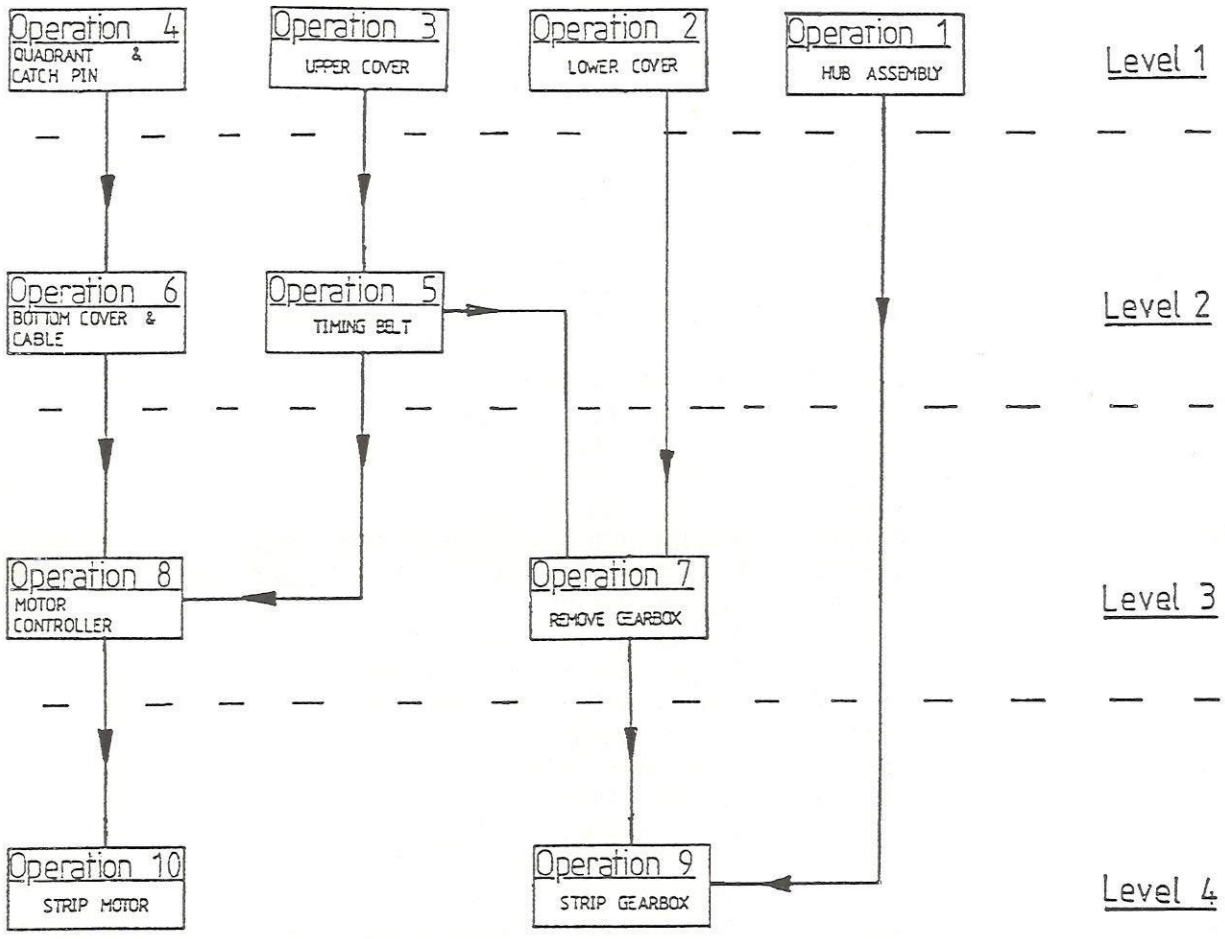


Fig.8 Gearbox assembly

GEARBOX ASSEMBLY

*		328452	GREASE (SHELL LGP1)
1		462428	GEARBOX COVER ASSY
2	#	412045	SCREW, PAN HD NO.8 8 X 13 'B'
3		204450	SHIM WASHER TPK
4		204436	SHIM WASHER (USE WITH 7 & 8) TPK
		204553	SHIM WASHER (USE WITH 7 & 8) TPK
5		353196	LARGE PULLEY ASSY
6		353213	DRIVE PINION ASSY
7		353184	INTERMEDIATE GEAR & PINION ASSY
8		177449	PENULTIMATE GEAR & PINION ASSY
9	#	203157	SEALING WASHER TPK
10		177475	FILLER CAP SCREW TPK
*		566640	PLASTIC PLUG
11		494598	WASHER, SEALING
12		479122	PLANET HUB NUT ASSY
13		441761	PLANET HUB & BEATER FIXING ASSY
		435059	PLANET HUB & BEATER FIXING ASSY (A907)
13A		182731	PLANET SHAFT
		435061	PLANET SHAFT (A907)
13B		441759	PLANET HUB & BEARING ASSY
		185329	PLANET HUB & BEARING ASSY (A907)
13C		183644	PLANET GEAR
13D		199459	PUSH ON FASTENER
13E		183527	SPACER (A907)
14		357233	GEARBOX BODY ASSY
		434835	GEARBOX BODY ASSY (A907)
15		204448	SHIM WASHER (USE WITH 16)
		204565	SHIM WASHER (USE WITH 16) TPK
16		462404	VERTICAL DRIVE SHAFT ASSY
		185331	VERTICAL DRIVE SHAFT ASSY (A907)
17		353172	OUTPUT SHAFT ASSY
18		353146	SLOW SPEED OUTLET SPRING
19		407026	SLOW SPEED OUTLET LEVER ASSY
20		366349	PIVOT, SLOW SPEED ATTACHMENT LEVER

DISMANTLING INSTRUCTIONS-SEQUENCE OF OPERATIONS



USING DISMANTLING OPERATIONS CHART

Do each operation level by level, following the arrows. Complete all operations on that particular arrowed line until the desired amount of dismantling is achieved.

16. OPERATIONS

1. Undo the domed hub nut and slide off the planet hub assembly.

2. Pull off slow speed lever knob, undo the two securing screws and remove the lower cover.

3. Remove covers from slow speed outlet, juice extractor and liquidiser. Mark the spigot to the spigot seat plate to the body. Undo the two screws and remove the spigot and spigot seat plate. Lift the rear of the cover and ease it off to the front.

4. Open machine, remove the two screws holding the quadrant bracket, remove the circlip on the catch pin and remove the quadrant bracket, pin, spring and push button from the pedestal.

5. Slacken the three motor securing screws and move motor to ease the belt tension, remove the belt.

6. Remove terminal block cover, disconnect the flexible mains lead and the lead to the motor controller. Unscrew the four screws holding the bottom cover and remove it. (With U.S.A. and Canada models the mains lead needs to be disconnected at the controller).

7. Undo the two M6 hexagonal bolts and remove the gearbox from the body.

8. Hold the motor controller in one hand and remove the three motor securing screws, lift out the motor.

9. Insert large screwdriver into slow speed outlet to lock the gear train and unscrew the large pulley, remove the shim washer underneath and retain. Remove six screws holding the top cover to the bottom and separate the two parts. Remove the penultimate gear assembly complete with two shim washers, remove the drive pinion, remove the intermediate gear assembly complete with two shim washers and lift out the vertical drive assembly complete with shim washers. Clean all components and examine for wear, damage, fractures and distortion, keeping the shim washers with their correct components.

10. Record the lead connections and unsolder the leads taking care not to overheat the semi-conductors. Remove the two adjusting screws complete with springs and lift off the control bar (or PCB and carrier). Mark the brush covers to the brush boxes to the controller housing, ease the retaining lugs to remove the capacitor covers and unscrew the brush box retaining screws and remove the boxes complete with brushes. Undo the fan assembly hexagonal socket screw and slide fan off shaft. Remove the tension pin with a suitable punch and pull off the small pulley. Mark the field coils to the end covers to the side cheeks and polish any scratches off the shaft with emery paper, (to protect the bearings). Pull off the side cheeks, remove the four screws and nuts joining the two end assemblies and separate the components. Remove the control knob insert by releasing the retaining lugs from underneath the control knob with a small screwdriver and pulling the insert out. Remove the circlip and pull off the control knob, spring and cam. The On-Off switch and the cut-out can now be eased out of the controller housing, if necessary.

17. INSPECTION OF MOTOR CONTROLLER

1. Armature and Fan Assembly

Check:-

a. That the fan is securely fixed to the shaft.
b. For burnt or badly worn commutator.
c. For damaged windings.
d. For damaged shaft or worn bearings.
e. For overheated windings.

Overheated windings will be apparent by discoloration or charring, a shorted coil by discoloration and low continuity of the defective coil and excessive pitting of two, or more commutator segments.

No attempt should be made to repair a faulty armature, always fit a replacement.

2. Armature Shaft.

The minimum size for the armature shaft diameter is 7.91mm (0.3114). Armatures with shaft dimensions below this size should be replaced.

3. Armature Insulation and Continuity Test.

Use a 500V dc Megger with the leads connected between the armature shaft and the commutator segments. If the reading is less than 5 Megohms, replace the armature. Using a continuity tester measure the armature coil resistance between each pair of opposite commutator segments (the brushes must be lifted if this test is done with the motor assembled) if the readings are outside the values in Table 1., replace the armature.

4. Field Assembly Tests

Visually check the field assembly for mechanical damage, overheating or burning. Measure the insulation resistance between one lead and the frame, it must read better than 5 Megohms. Check that the continuity resistance of each coil measured between the supply leads is within the values in Table 1. If any part of the assembly fails any of these tests, the complete field assembly must be changed.

If the coil assembly checks are correct but the supply lead insulation is perished, the leads may be repaired with a suitable insulating sleeve.

220/240V	A901D	A902-A903
Each armature winding	7.5-8.5 ohms	9.8-10.8 ohms
Each field coil	3.25-3.75 ohms	5.45-5.95 ohms

TABLE 1

Note. with 120V motors the resistance of an armature winding is 2.17 ohms and a single field is 0.96 ohms. It is not likely that readings of this accuracy can be measured under normal servicing conditions. Reject 120V components which fail the insulation or continuity tests or where there is excessive pitting on opposite pairs of commutator segments. (When in doubt - replace the armature assembly or field coil assembly, as necessary).

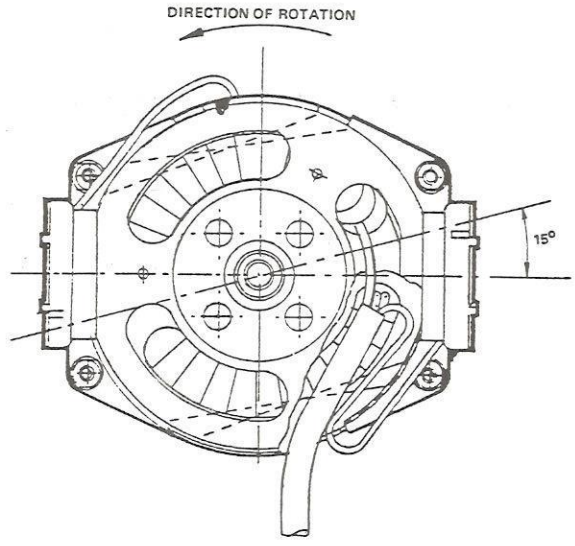
5. End Frame Assemblies.

The end frame assemblies are fitted with oil impregnated sintered bronze bearings and lubricated by felt washers soaked in oil. The bearings are held in position by a spring steel retainer with sufficient tension to allow for alignment and prevent any possibility of skidding. If the bearings are badly worn (maximum bore 7.92mm/0.3121 ins) they should be changed by drilling out the rivets from the inside of the end frame and discarding the bearing retainer, felt washers and bearing. Replace with new parts and soak the felt washers with Shell Turbo 41 before re-assembly of the end frames.

18.RE-ASSEMBLY OF MOTOR

Having checked all the components and replaced any defective parts, the motor can now be assembled as follows:-

1. Place field assembly in the commutator end frame, aligning the marks previously made (Should end frame or field coil have been changed, the field assembly must be assembled 15 degrees from centre line of end frame in direction of rotation of armature. Fig.9 . Thread all supply leads through holes in side cheeks.



Field assembly alignment Fig.9

2. Lightly oil armature shaft and refit into the commutator end frame, ensuring that the field coil leads do not foul the armature.

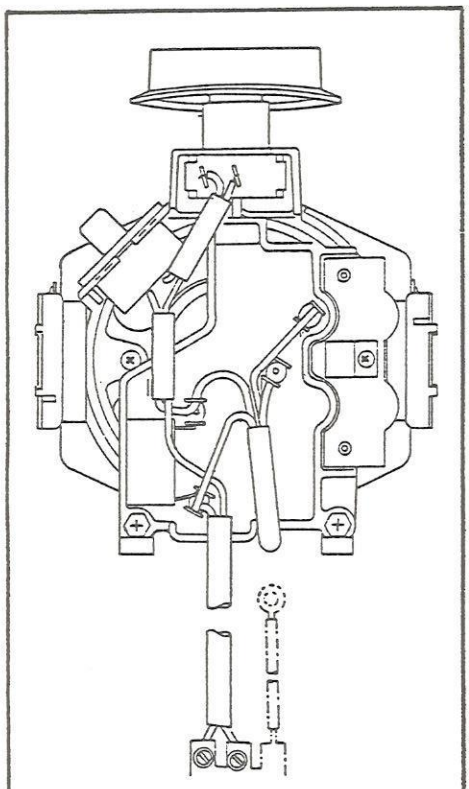
3. Fit drive end frame over armature shaft until the two end frames meet at original marks and replace screws, nuts and washers, tighten evenly. Refit small pulley and tension pin. Refit governor assembly (or fan and magnet assembly) to give an armature end float of 0.025-0.075mm. (0.001-0.003 ins).

4. Insert brush holders and brushes, refit brush boxes complete with capacitors aligning the original marks to ensure that the boxes are not reversed, replace brush covers.

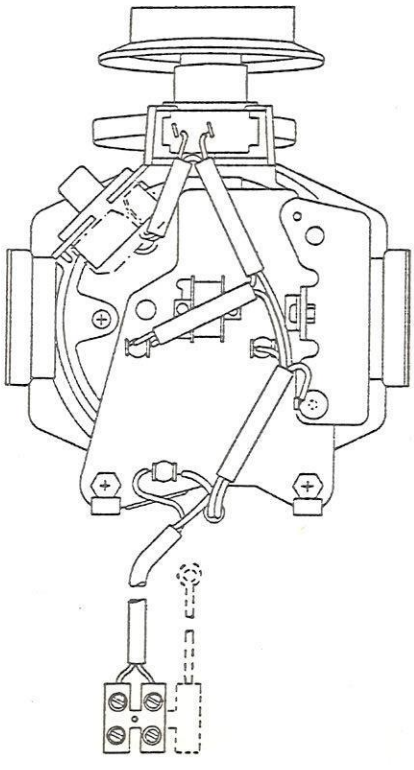
5. Replace on-off switch, speed control cam, control knob, spring and clip. Replace control knob insert and cut-out with shroud.

6. Refit contact bar assembly (or PCB and carrier), ensuring controller pin engages in speed control cam slot. Re-solder the leads in accordance with the record taken in Operation 10 and Fig.10 Set the adjusting screws to give a gap between 8.0 and 14.5mm Fig.11.

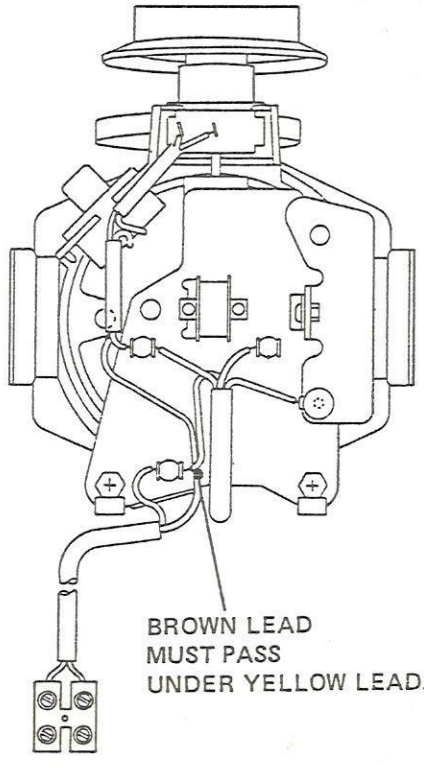
Fig. 10



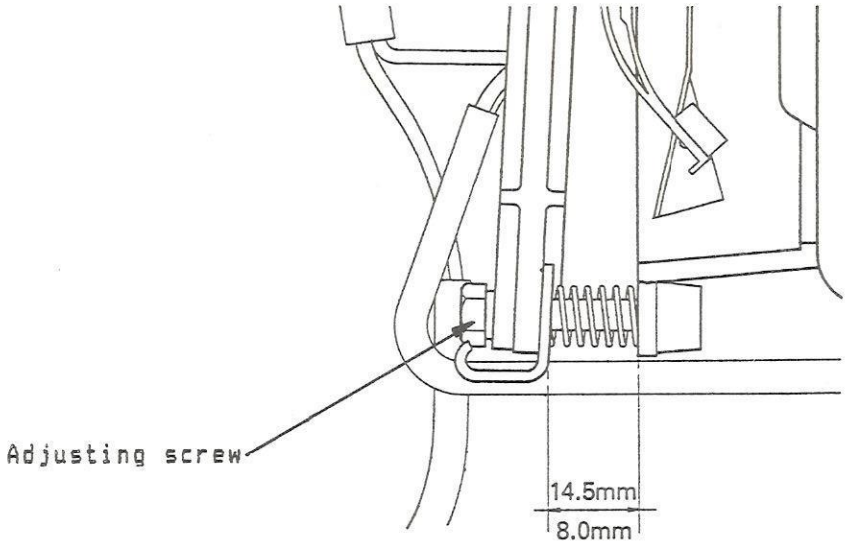
MOTOR CONTROLLER GOVERNOR
220V & 120V TYPES.



LEAD ARRANGEMENT
MOTOR CONTROLLER
220/240V ONLY.

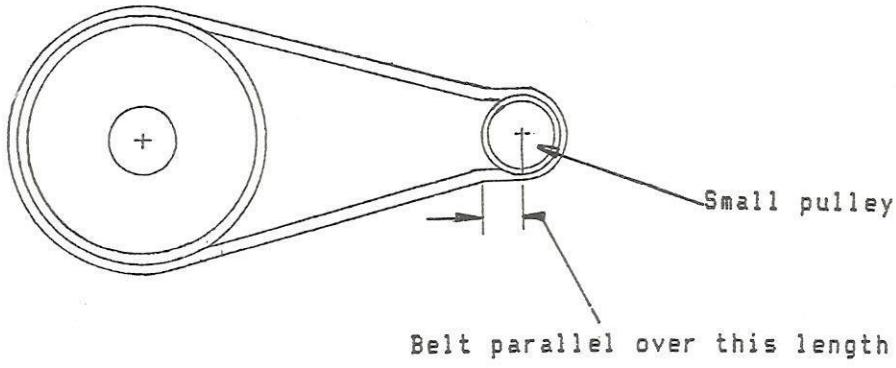


LEAD ARRANGEMENT
MAGNETIC MOTOR CONTROLLER
100/120V ONLY.



Speed adjustment Fig. 11

7. Run the motor and using a tachometer placed in the centre of the small pulley, check the motor speed. This should be between 4,000 and 4,500 r.p.m. at control knob setting 1 for governor control and 2,750 to 3,250 r.p.m. for magnetic control.



Belt Tension Fig. 12

8. Replace the motor controller.

Replace motor controller in the body and tighten the 3 screws enough to allow the motor mounting ring to be moved. Fit the timing belt and move the motor until the correct tension is obtained as shown in Fig.12 Tighten the securing screws. Fit body cover, replace mains lead, quadrant, catch pin assembly (lightly grease the pin) and quadrant bracket.

19. GEARBOX ASSEMBLY INSTRUCTIONS

1. Thoroughly clean all the components, lightly coat gear teeth and shafts with grease LPG1.

2. Replace vertical drive shaft assembly with both shim washers. Replace gearbox cover assembly and hand tighten the six securing screws.

3. Measure the end float on the vertical drive shaft, if necessary change the shim washers (item 4) to obtain a measurement of 0.025-0.375 mm (0.001-0.015 ins.).

4. Remove gearbox cover assembly and replace the intermediate gear assembly and the penultimate gear assembly complete with their respective shim washers.

5. Replace the drive pinion assembly, put 135 grammes of Shell grease LPG1 in the gear box body, seal the cover assembly with sealing compound and tighten the cover screws.

6. Replace the planet hub assembly putting 2 grammes of Shell grease LPG1 on the internal gear rivetted to the gearbox body. Tighten the Planet hub nut to a torque of 8.5-9.6Nm (75-96 lbf.ins.).

7. Check that the gear train turns freely by hand - if not, investigate the cause. Re-check that the vertical drive shaft end float is still within tolerance.

8. Put the shim washer on the drive pinion and replace the large pulley assembly. Fit two new gearbox dowel tubes and bolt the gearbox assembly to the body assembly and tighten the two M6 bolts to a torque of 5.4-6.3 Nm (60-70 lbf.ins.)

9. Put a few drops of light oil to the liquidiser outlet bush before running in the gearbox for 5 minutes at maximum speed. Grease can escape from the slow speed outlet - this is a design feature to allow any excess pressure in the gearbox to be relieved.

20. ELECTRICAL TEST OF COMPLETE MIXER

Short the two supply leads at the plug, connect a 500V d.c megger between this short and the metal casing. A reading of at least 10 Megohms must be obtained. Switch speed control knob to minimum and repeat test. A reading of at least 2 Megohms must be obtained. Remove short.

Where an earth lead is fitted measure its resistance with a continuity meter. The reading must not be more than 0.15 ohm between the plug earth terminal and the metal casing.

If the above standards are not achieved, the cause must be investigated and rectified before using the appliance.

21. SPEED ADJUSTMENT

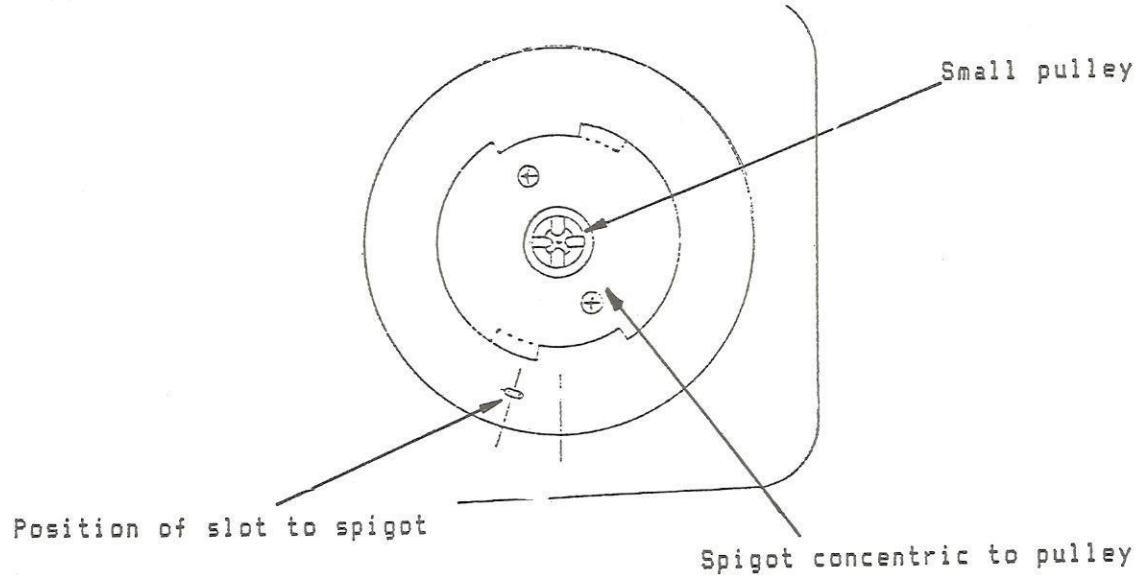
The speed of the planet hub should be within the range 60 to 80 r.p.m. (40 to 48 r.p.m. for A901D, A902, A903) at the minimum setting of the control knob and can be checked by using a stopwatch and counting the revolutions of the planet hub. At maximum setting it should be more than 180 r.p.m. (160 r.p.m. for A901D, A902, A903).

The speed adjusters are accessible through a body cover slot and the adjacent hole.

a. The screws should be adjusted evenly, half a turn at a time, turn in a clockwise direction to reduce speed or in a counter-clockwise direction to increase speed.
b. After adjustment, switch on at the minimum setting of the control knob and re-check the speed within 15 seconds.
c. If the speed is still incorrect, repeat steps (a) and (b).
d. If the correct speed is still not attained, repeat the test procedure from operation 6. RE-ASSEMBLY OF MOTOR.

22. REPLACE COVERS

Place the felt in the gearbox lower cover and secure to the body with the two screws. Tilt the top cover and slide it over the slow speed spigot, (align the original marks). Move the spigot so that it is concentric with the top of the small pulley as shown in Fig.13 and tighten the screws. Push the slow speed attachment knob back onto its lever. Replace the three outlet covers and clean the mixer with warm soapy water.



Spigot alignment Fig. 13

23. ADJUSTMENT OF BEATERS

The correct adjustment for beaters is as follows:-

a. Whisk: Just clear of the base of the bowl.
b. 'K' Beater: Not more than 2.3mm (3/32") off the base of the bowl.
c. Dough Hook: 9.5mm (3/8") off the base of the bowl.

To adjust: screw the shaft in or out to achieve the correct clearance and tighten the locking nut to 10.7-11.3NM(95-100lbins.)

SECTION TWO MIXER ATTACHMENTS

SECTION TWO MIXER ATTACHMENTS

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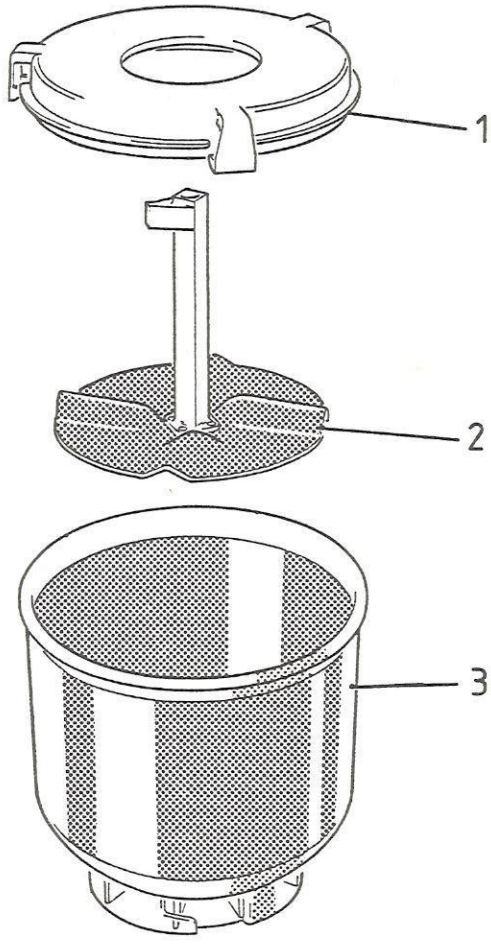
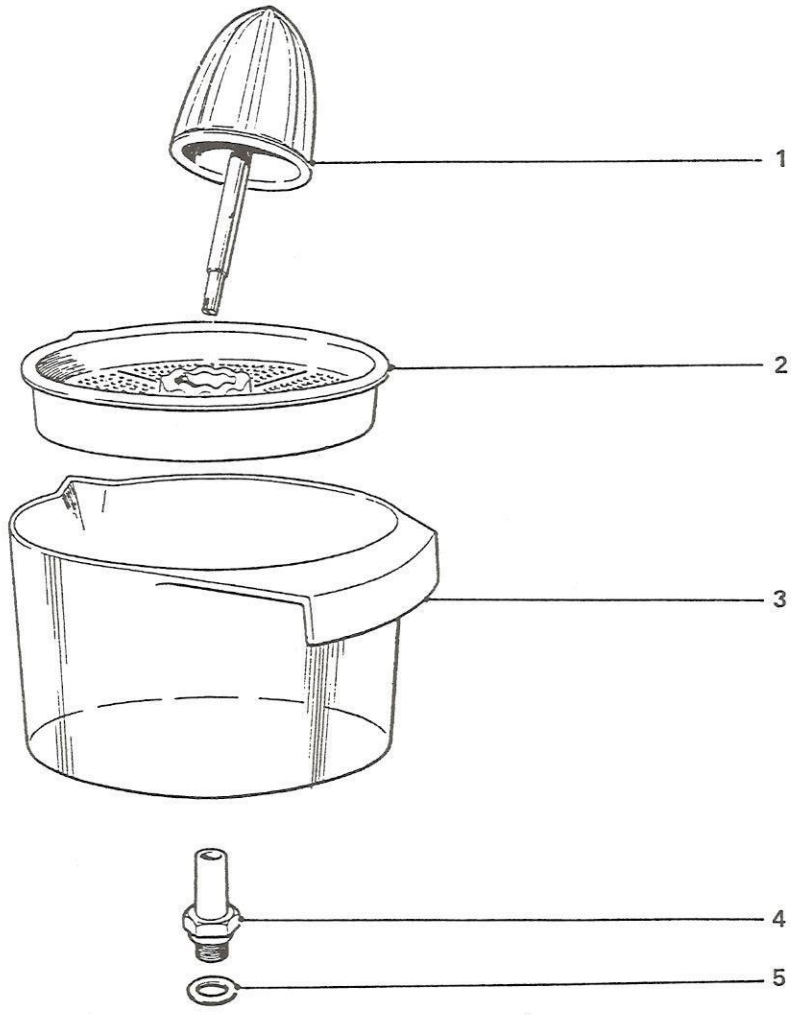
ATTACHMENT APPLICABILITY

ATTACHMENT	A901 CHEF	A907 MAJOR
COLANDER & SIEVE	A992	A930
POTATO PEELER	A934	A752
POTATO PEELER	A991	–
KENLYTE BOWL	265026	412083
STAINLESS STEEL BOWL	343270	218748
DOUGH HOOK	186701	434770
WHISK	353677	434809
'K' BEATER	182781	434756
SPLASHGUARD & MEASURE	364571	NOT AVAILABLE
'D' BOWL (A902) (A903)	487052	NOT AVAILABLE



A752 Potato peeler

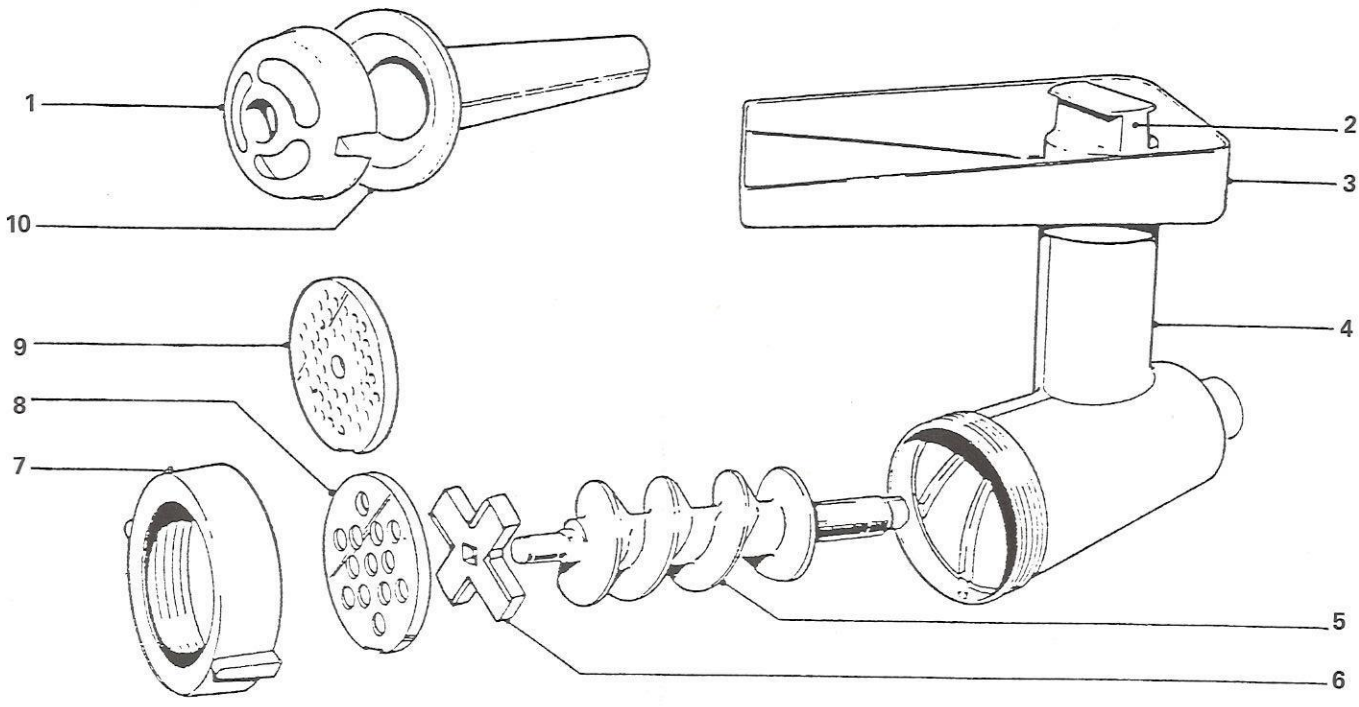
Item	TDA	Description
1	410009	Cover
2	436106	Drive Plate Assy.
3	436118	Bowl Assy.
*	439146	Instruction Leaflet



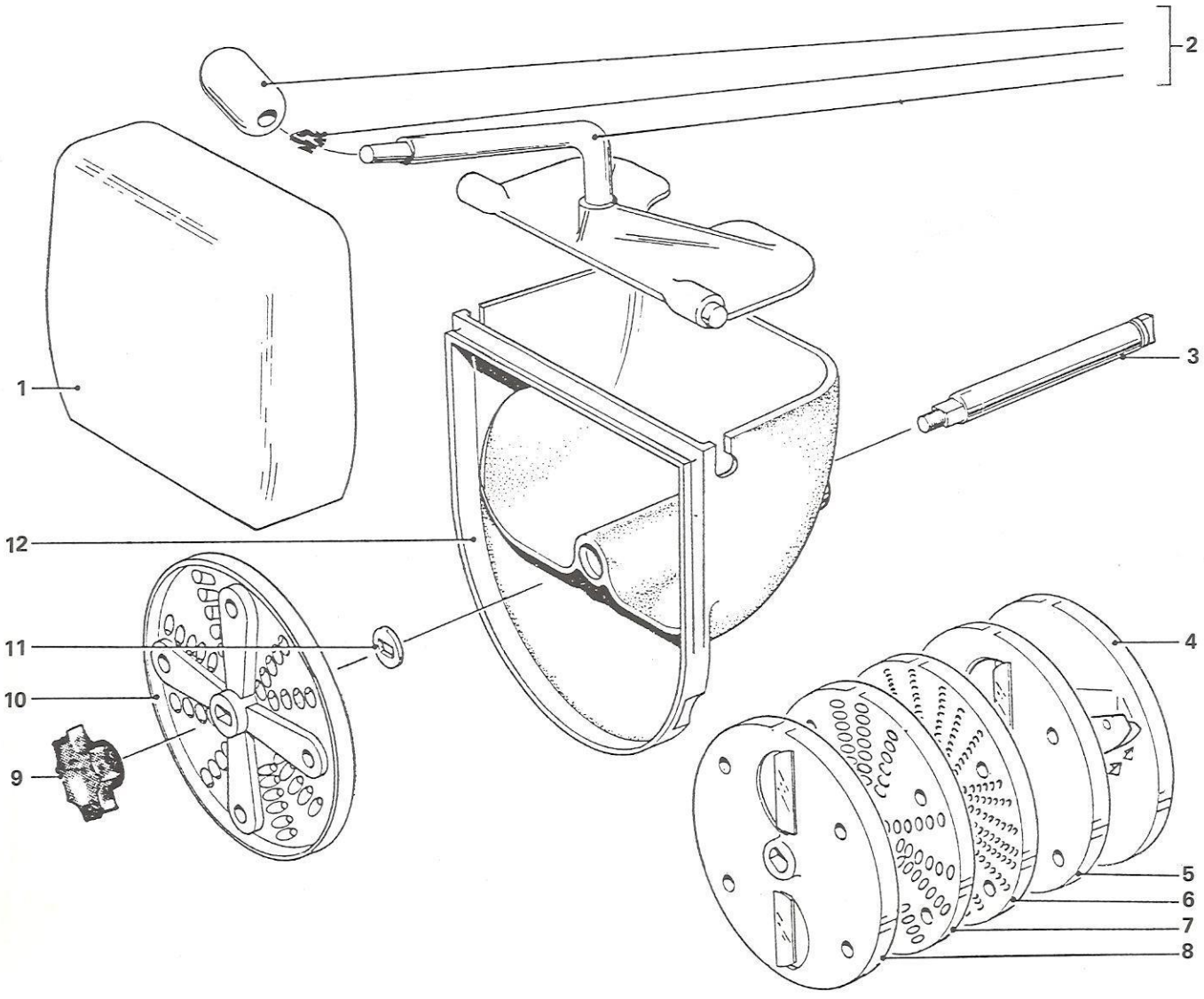
A795 Juice extractor

IT	TDA	DESCRIPTION
*	207672	INSTRUCTION LEAFLET
01	184428	REAMER
02	184442	STRAINER
03	184454	BOWL
04	184430	ADAPTOR
05	203456	WASHER, FIBRE

KENWOOD MIXER ATTACHMENTS



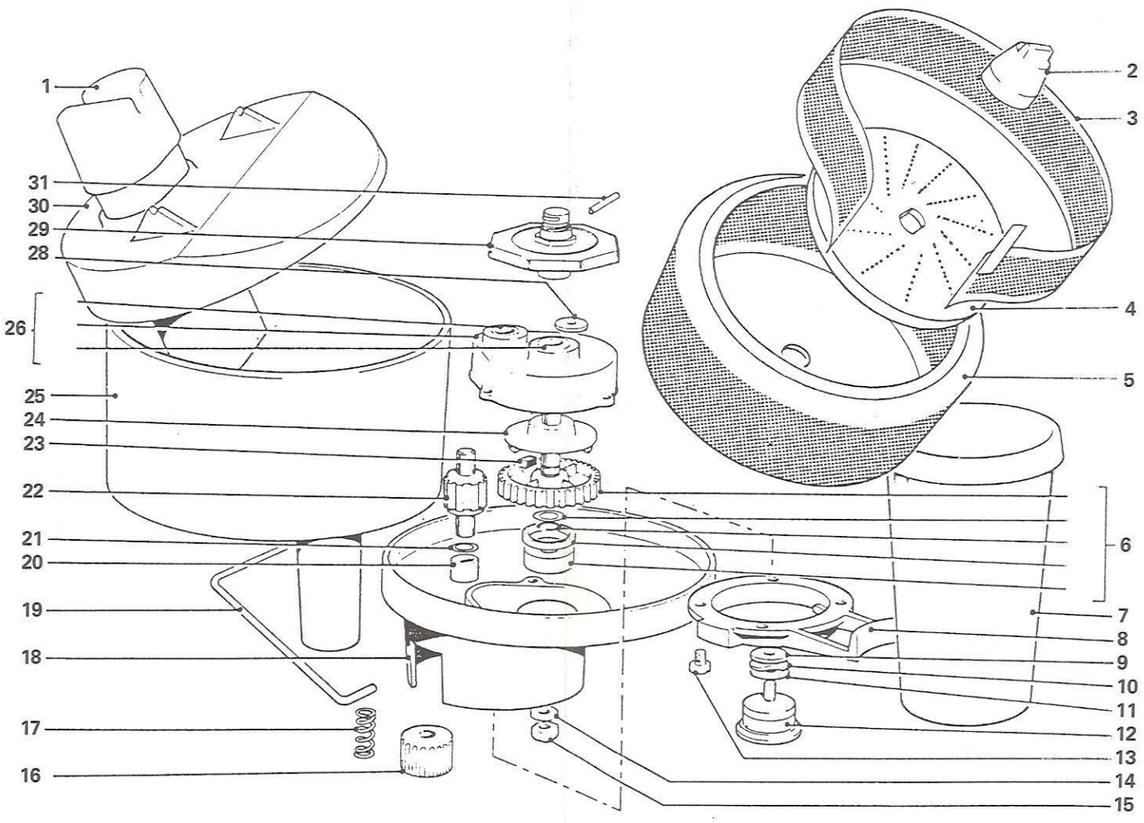
	A920	MINCER
	A926	SAUSAGE MAKING ATTACHMENT
	A937	KIBBEH MAKING ATTACHMENT
*	425810	CLEANING BRUSH
1	361105	BEARING PLATE
2	186567	PUSHER ASSY
3	186555	HOPPER
4	354724	BODY ASSY
5	462387	SCROLL (REPLACES METAL TYPE)
6	344224	MEAT CUTTER
7	186517	RING NUT
8	354736	MEAT SCREEN (COARSE)
9	186529	MEAT SCREEN (FINE)
*	334619	MEAT SCREEN (EXTRA FINE)
10	178845	SAUSAGE ADAPTOR



A922 SLOW SPEED SLICER & SHREDDER

1	195221	FRONT COVER
2	371423	PUSHER ASSY COMPLETE
3	195233	DRIVE SHAFT
4	195219	CUTTER PLATE, CHIPPER
5	195207	CUTTER PLATE, THIN SLICE
6	N.L.A.	CUTTER PLATE, FINE SHRED
7	N.L.A.	CUTTER PLATE, MEDIUM SHRED
8	195166	CUTTER PLATE, THICK SLICE
9	195245	RETAINING NUT
10	195180	CUTTER PLATE, COARSE SHRED
11	221305	SPECIAL WASHER
12	361076	BODY ASSY

KENWOOD MIXER ATTACHMENTS



A923 High speed juice separator

A923 HIGH SPEED JUICE SEPARATOR

1		235071	PUSHER ASSY
2		238372	HUB NUT
3		182975	STRAINER
4		238360	GRATER PLATE
5		235112	BASKET
6		238437	GEAR & SHAFT ASSY
7		235100	BEAKER
8		N.L.A.	LATCH & BEAKER SUPPORT
9		204321	THRUST WASHER
10		204113	CRINKLE WASHER
11		204668	WASHER
12		355182	DRIVE COUPLING ASSY
13		234338	SCREW PAN REC NO 10 X 16
14	#	256790	WASHER M6
15		238449	NUT M6
16		235136	LOCKING SCREW
17		235162	STIRRUP SPRING
18		N.L.A.	BASE
19		N.L.A.	STIRRUP
20		235069	BEARING
21		204450	SHIM WASHER
22		234986	PINION SHAFT ASSY
23		235203	DRIVE PAD
24		235227	SHAFT SUB ASSY
25		235095	JUICE BOWL
26		234998	GEARBOX UPPER ASSY
28		203779	WASHER SHAKEPROOF 4BA
29		235148	DRIVE PLATE
30		411106	TOP COVER
31		N.L.A.	TENSION PIN

A923 High Speed Juice Separator

Dismantle

1. Lift out pusher assembly, release stirrup and remove top cover.

2. Use the pusher cap to release the hub nut, remove the basket assembly, juice bowl and grater plate.

3. Invert the base and remove the stirrup by pulling out one side at a time and retain the two stirrup springs.

4. Undo four screws and remove the latch and beaker support complete with locking screw.

5. Hold drive plate and turn the drive coupling assembly clockwise to remove (left hand thread). Undo the M6 nut on the gearbox shaft and retain the washer.

6. Undo three screws securing gearbox upper assembly and remove it complete with the drive plate. The pinion shaft assembly and shim washer can now be lifted out of the body.

7. Remove the circlip from the gear shaft and slide off the shim washer and gearwheel - the four drive pads can now be removed.

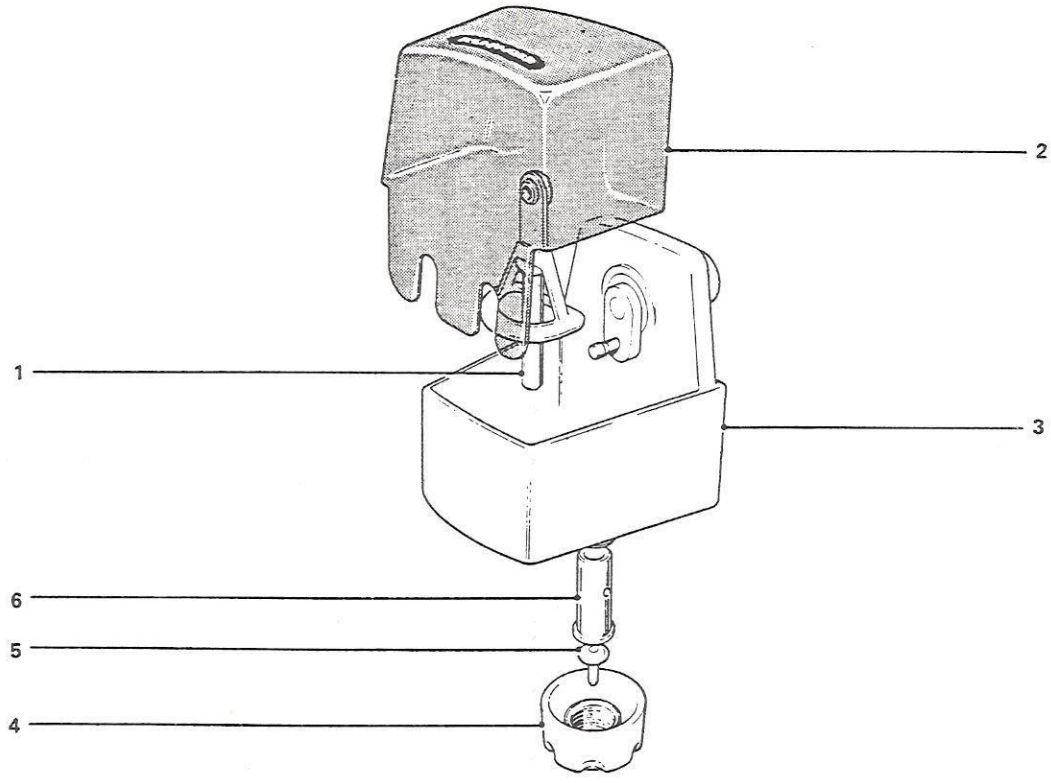
8. Dismantle the drive plate, if required by removing the tension pin and sliding off the drive plate.

9. Clean and inspect all components for excessive wear or damage and replace where necessary.

Assemble

1. Re-assemble in the reverse order using the following items and methods:

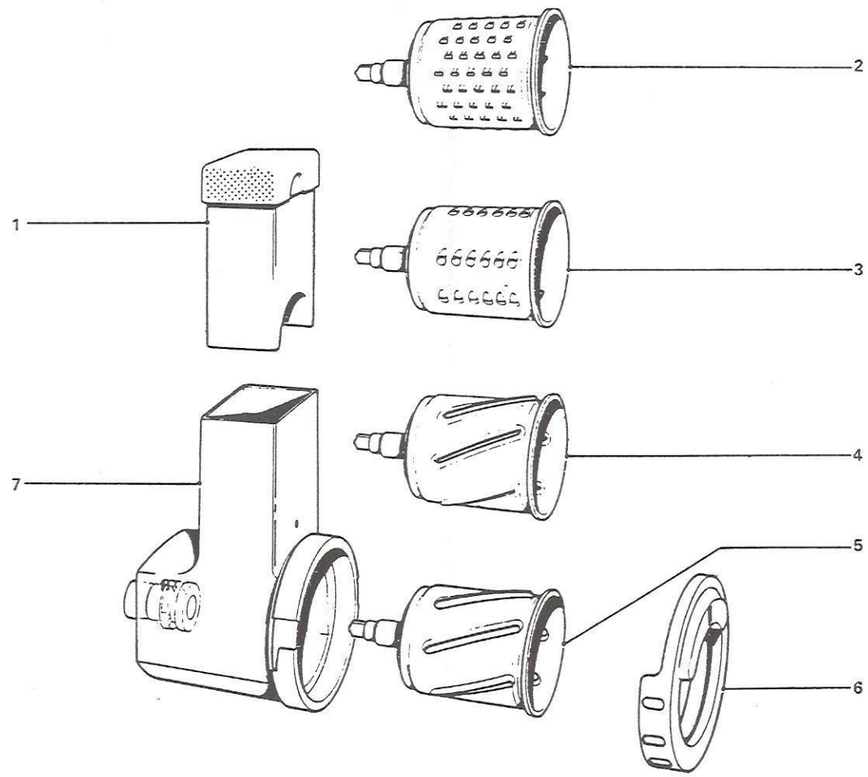
a. Put 20-30 grams of Shell LPG1 grease in the gearbox.
b. Seal the gearbox joint faces with one of the following compounds:- Silcoset 152, Silcoset 153, Dow Corning 732 RTV, Dow Corning 781, Hermetite Silicone RTV102.
c. Renew crinkle washer Item 10 to maintain the correct end float.
d. Lock the threads of the drive coupling, the M6 nut and the gearbox upper assembly securing screws with Casco Met Lock.
e. If the feed tube of the top cover fouls the grater plate, correct by removing some plastic from the feed tube. Assemble attachment and fit on machine, but do not locate the stirrup. Switch on the machine, press firmly around the top area of the feed tube. Switch off, and clean out the plastic filings.



A927 CREAM MAKER

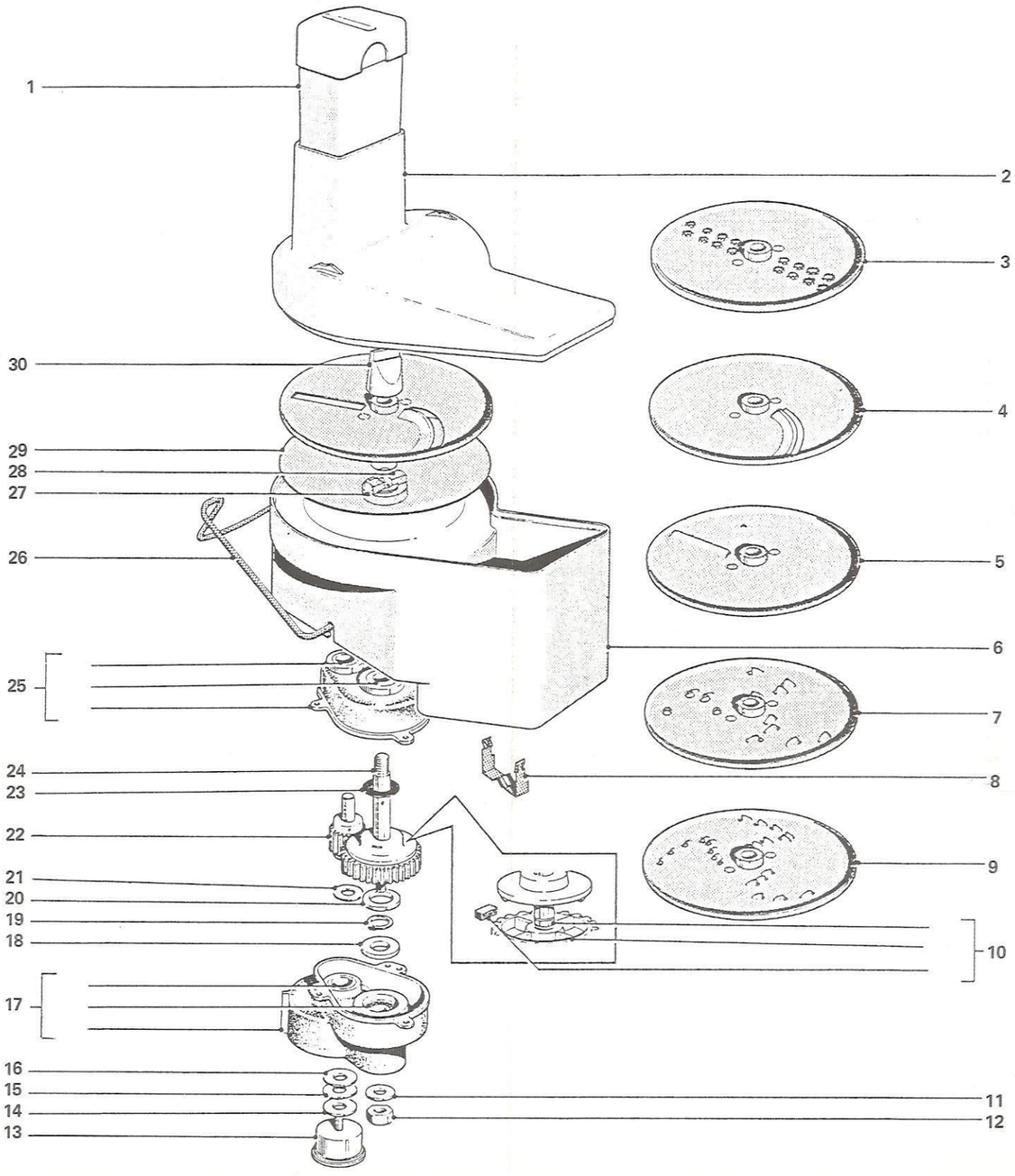
1	234649	PISTON ASSY
2	234675	COVER ASSY
3	354700	BODY ASSY
4	457320	KNOB (BROWN)
	600850	KNOB (BURGUNDY)
5	234651	VALVE ASSY
6	234596	CYLINDER

KENWOOD MIXER ATTACHMENTS



A928 SLOW SPEED SLICER AND SHREDDER

1	335091	PUSHER ASSY
2	335053	DRUM ASSY NO.1 FINE SHREDDER
3	335065	DRUM ASSY NO.2 COARSE SHREDDER
4	335077	DRUM ASSY NO.3 THIN SLICE
5	335089	DRUM ASSY NO.4 THICK SLICE
6	335106	DRUM RETAINER
7	354695	BODY



A929 High speed slicer and shredder

A929 HIGH SPEED SLICER AND SHREDDER

*	514477	BASE CASTING (USE WITH NEW DESIGN)
*	491900	SCREW, PAN REC NO 6X25
1	335742	PUSHER ASSY
2	404751	TOP COVER
3	432318	EXTRA FINE GRATER PLATE (PARMESAN)
4	335778	COARSE SLICE PLATE NO.1
5	335780	FINE SLICE PLATE NO.2
6	336411	BASE MOULDING (EARLY PROD)
6A	464880	BASE MOULDING
7	335792	COARSE SHRED PLATE NO.3
8	335883	SPRING CLIP (EARLY PROD)
8A	464892	BRACKET
9	335807	FINE SHRED PLATE NO.4
10	335857	GEAR & SHAFT ASSY
11	256790	WASHER M6
12	238449	NUT M6
13	355182	DRIVE COUPLING ASSY
14	204668	WASHER
15	204113	CRINKLE WASHER
16	204321	THRUST WASHER
17	514453	GEARBOX LOWER ASSY (NEW DESIGN)
	N.L.A.	GEARBOX LOWER ASSY ORIGINAL DESIGN
18	235057	BEARING RETAINER
19	235033	CIRCLIP
20	235045	SHIM WASHER
21	204450	SHIM WASHER
22	234986	PINION & SHAFT ASSY
23	335845	FELT WASHER
24	338304	SHAFT SUB ASSY
25	234998	GEARBOX UPPER ASSY
26	335871	STIRRUP (EARLY PROD)
26A	464907	STIRRUP
	464919	STIRRUP ASSY NORTH AMERICA
27	335821	PIN
28	457344	DRIVE DOG
29	335819	SLINGER PLATE
30	335766	NUT CASTING

A929 High Speed Slicer and Shredder

1. Release stirrup and remove top cover and pusher assembly.

2. Prevent the nut casting from rotating with the slot in the pusher assembly and turn the drive coupling clockwise to remove (left hand thread). Retain the thrust washer, crinkle washer and plain washer.

3. Use pusher cap to undo the nut casting and remove cutter plate and slinger plate.

4. Mark drive dog to shaft, remove tapered pin and pull drive dog from shaft.

5. Invert base moulding, remove three screws securing the gear box assembly and detach the gear box.

6. Undo two screws and remove the gearbox upper assembly.

7. Remove M6 nut and washer from the lower end of the gear shaft and withdraw gear shaft assembly complete with felt washer, and pinion shaft assembly complete with shim washer.

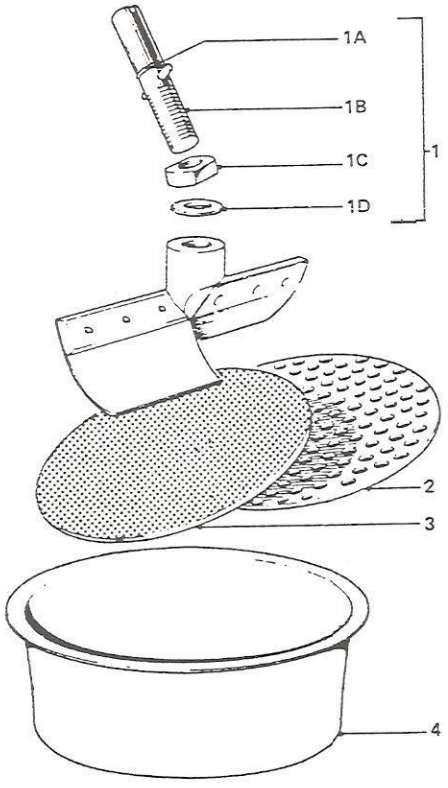
8. Remove the circlip from the gear shaft, and slide off the shim washer and gearwheel - the four drive pads can now be removed.

9. Clean, and inspect all components for excessive wear or damage and replace where necessary.

Assemble

1. Re-assemble in reverse order using the following items and methods:-

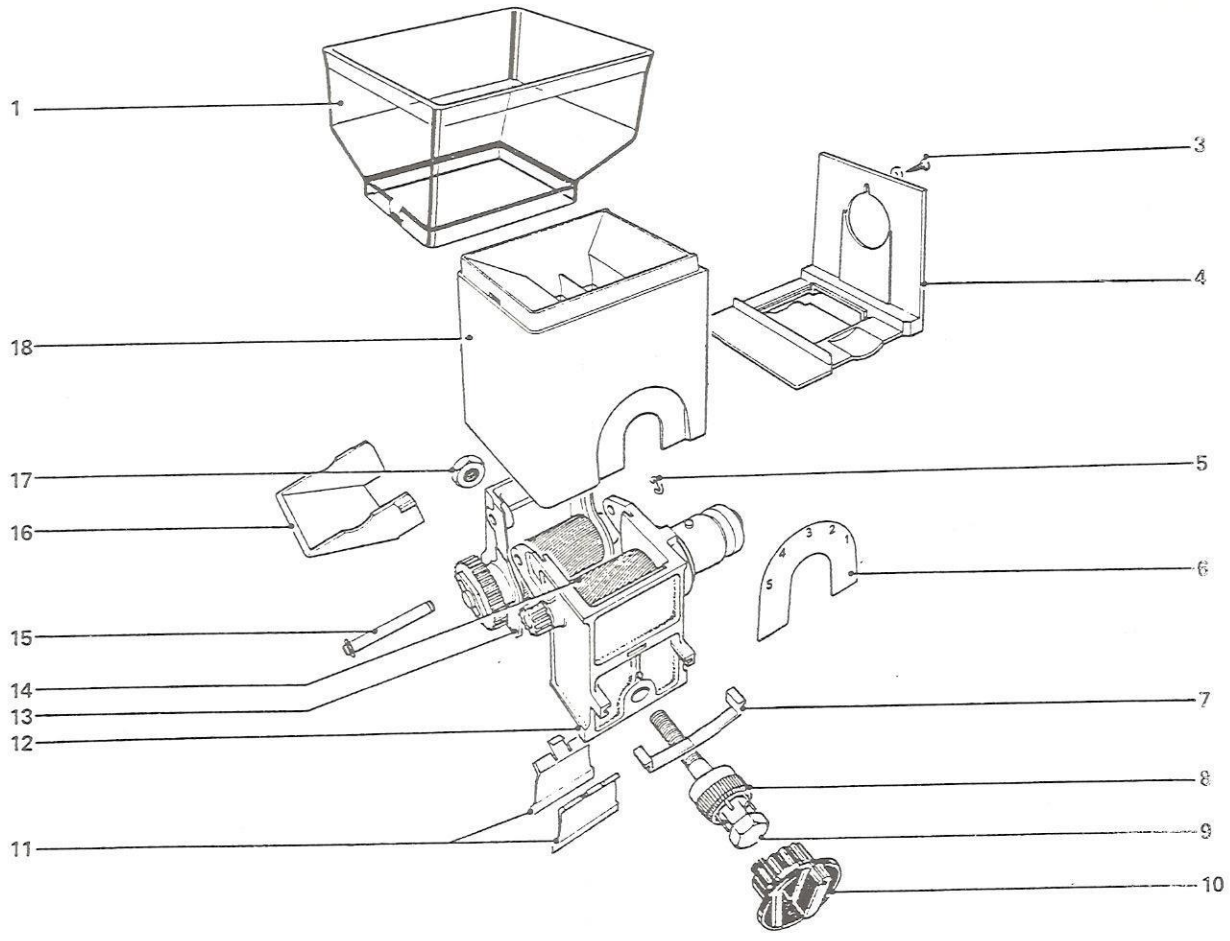
a. Put 20-30 grams of Shell LPG1 grease in the gearbox.
b. Seal the gearbox joint faces with one of the following compounds:- Silcoset 152, Silcoset 153, Dow Corning 732 RTV, Dow Corning 781, Hermetite Silicone RTV 102.
c. Renew crinkle washer Item 15 to maintain the correct end float.
d. Lock the threads of the drive coupling, M6 nut and the three gearbox securing screws with Casco Met Lock.



A930 COLANDER AND SIEVE

1	438647	WIPER BLOCK & SHAFT ASSY
1A	437904	CIRCLIP
1B	438659	DRIVE SHAFT ASSY
1C	177578	LOCKNUT
1D	204357	WASHER
2	180484	SIEVE DISC (COARSE)
3	180537	SIEVE DISC (FINE)
4	238968	COLANDER BOWL

KENWOOD MIXER ATTACHMENTS



A931 WHEAT MILL

1	371461	HOPPER
2	205430	WASHER 4BA
3	N.L.A.	SCREW, PAN NO 6X13
4	371497	BASE COVER
5	198493	E CLIP
6	371485	CALIBRATION RING
7	371526	LATCHING BAR
8	371514	KNOB INSERT
9	371552	ADJUSTMENT BOLT
10	371540	KNOB (BROWN)
	600862	KNOB (BURGUNDY)
11	373639	SCRAPER
12	371564	ROLLER FRAME (FIXED)
13	371576	ROLLER FRAME (ROTARY)
14	382757	ROLLER HIGH SPEED
15	371538	PIVOT PIN
16	371502	CHUTE
17	371588	NUT THIN M10
18	371473	COVER

A931 Wheat Mill

Dismantle

1. Detach feed hopper and release delivery chute by squeezing chute sides to free locating lugs from rim of aperture in underside of base cover.

2. Remove screw and washer above drive shaft base cover.

3. Ease top cover moulding lugs from edge of base cover and lift apart, and take bottom cover off drive shaft.

4. Mark latching bar to frame and pull off.

5. Ease the two retaining lugs on the adjustment knob and slide knob off splined insert.

6. Unscrew and remove adjustment bolt and nut.

7. Remove one 'E' clip from pivot pin and release assembly by pulling pin clear.

8. Remove scrapers, if required, by easing out their locating lugs.

9. If required, remove roller from adjustable frame by locking the roller with a large screwdriver protected with cloth, and turning the drive gear clockwise (left hand thread). The drive gear is fixed to the roller shaft with a tension pin.

10. If required, remove roller from fixed frame by locking the roller and turning the drive gear counter-clockwise. This drive gear is attached to the shaft with a left hand thread.

Assemble

1. Replace rollers and scrapers if removed.

2. Assemble roller frames, replace pivot pin and secure with 'E' clip.

3. Replace adjustment bolt and nut. Bolt to be finger tight for correct roller adjustment.

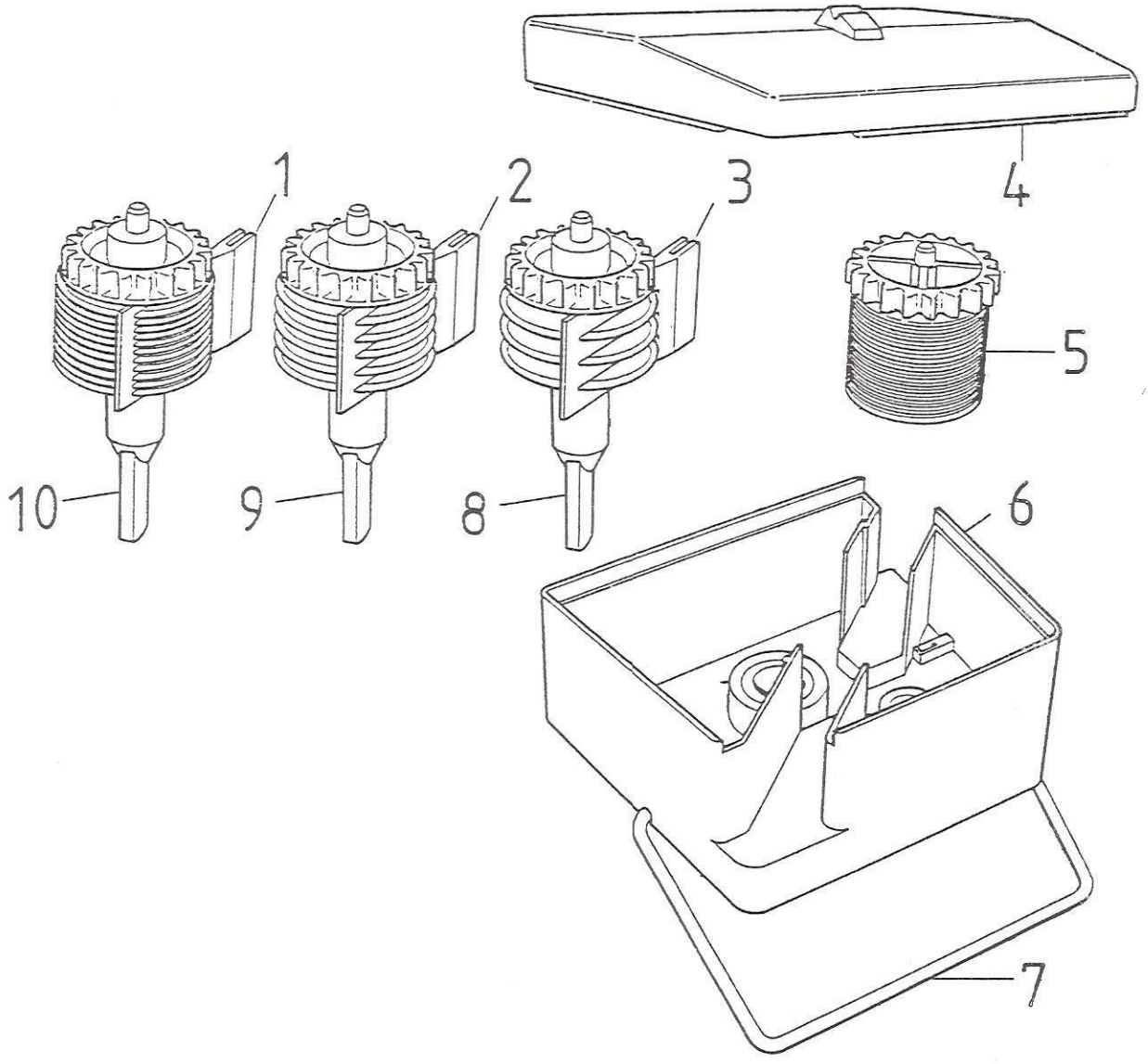
4. Replace knob so indicator points to position '1'. Check that the left-hand stop of the knob is to the left of the central post on the roller frame. Ensure the knob clips engage within the insert.

5. Replace latching bar to original marks.

6. Replace base cover and top cover and secure with screw and washer.

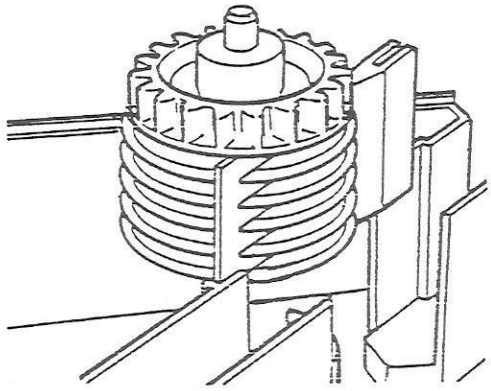
7. Replace delivery chute and feed hopper.

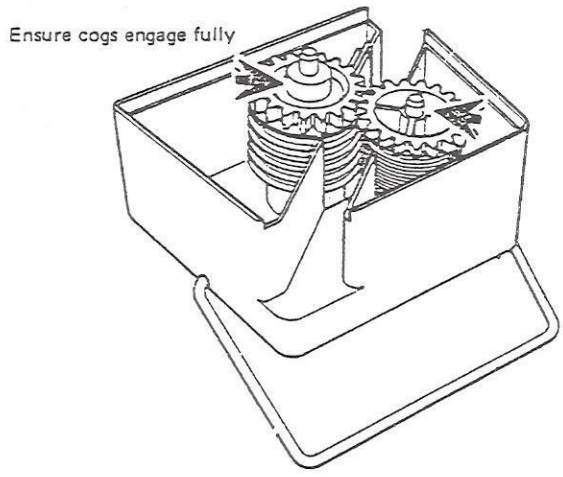
KENWOOD MIXER ATTACHMENTS



A932 BEAN-PEEL/SLICER

1	364705	COMB (FINE)
2	364717	COMB (MEDIUM)
3	364729	COMB (COARSE)
4	364688	COVER
5	364767	GUIDE SHAFT
6	364676	BODY MOULDING
7	364690	COVER CLIP
8	364755	CUTTER SHAFT (COARSE)
9	364743	CUTTER SHAFT (MEDIUM)
10	364731	CUTTER SHAFT (FINE)

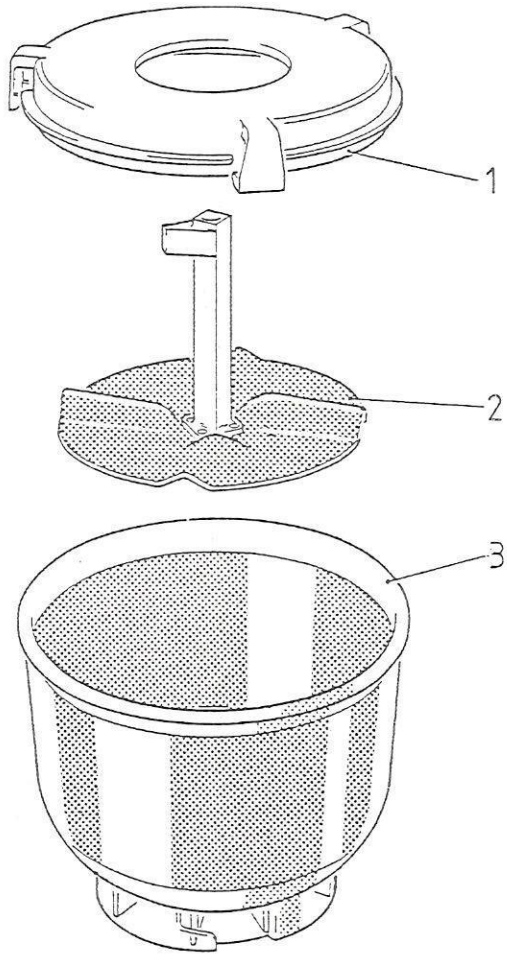




Note:

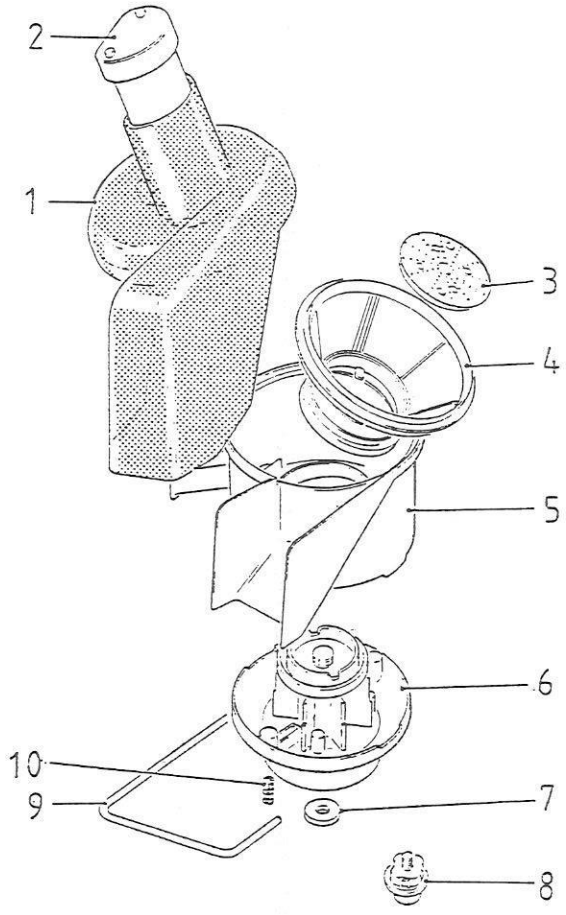
1. When assembling, fit comb to its own cutter and slide into body moulding ensuring the comb is correctly positioned Fig.??.

2. When replacing the gear shaft ensure that the gear teeth engage fully with the cutter shaft teeth. Fig.??.



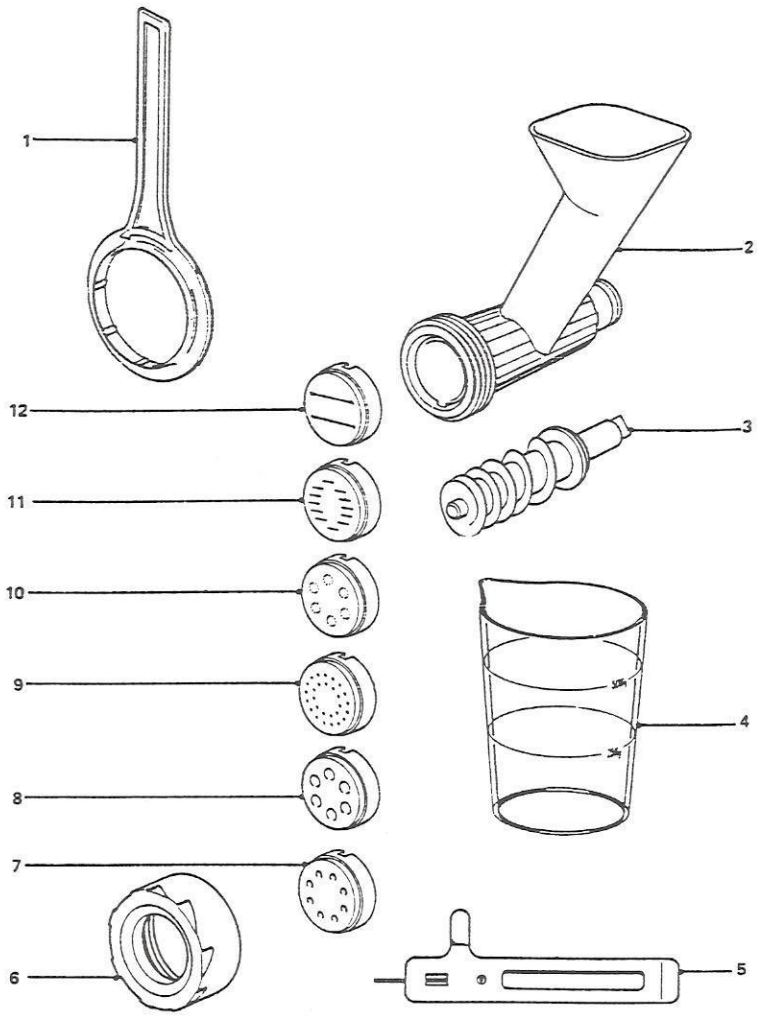
A934 POTATO PEELER

*	483915	PIVOT
*	483927	RIVET
1	410009	COVER
2	483563	DRIVE PLATE ASSY
3	483575	BOWL ASSY



A935 CONTINUOUS JUICE SEPARATOR

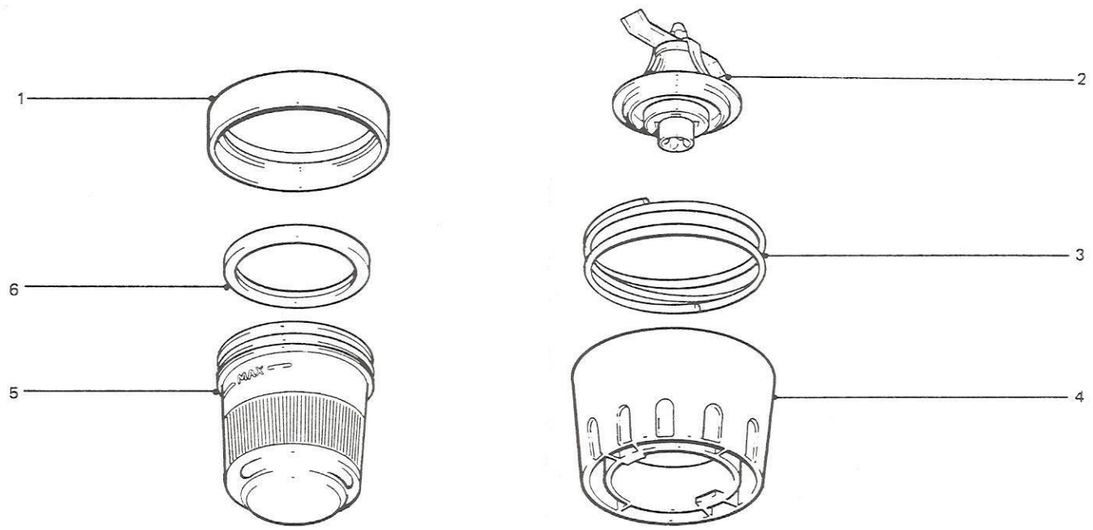
*		454005	WASTE CHUTE SHIELD
1		412655	TOP COVER
2		412681	PUSHER ASSY
3		412693	GRATER PLATE ASSY
4		412679	BASKET
5		431651	JUICE BOWL
6		431637	BASE ASSY COMPLETE
7	#	426890	WASHER M6
8	*	426917	DRIVE COUPLING ASSY
9		412734	STIRRUP
10		235162	STIRRUP SPRING



A936 PASTA MAKER

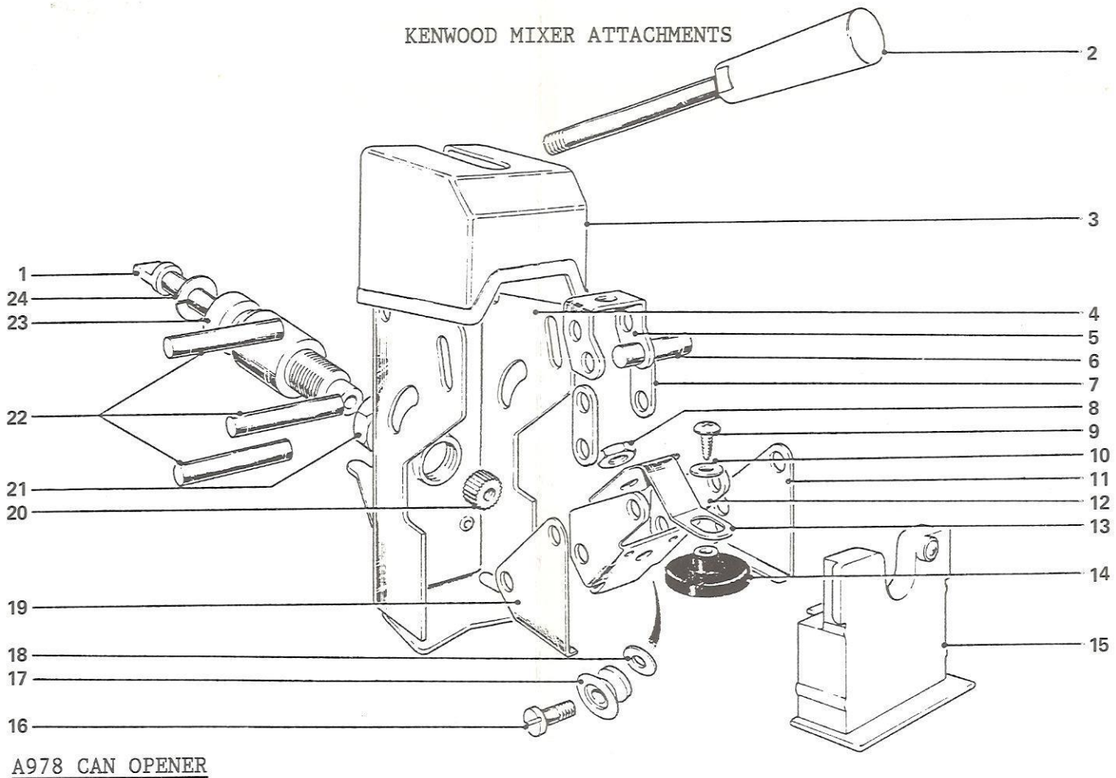
1	447272	SPANNER
2	447296	BODY ASSY
3	447284	SCROLL ASSY
4	447313	MEASURE
5	447301	SCREEN CLEANING TOOL
6	447260	RING NUT
7	447210	SCREEN, MACARONI
8	447258	SCREEN, LARGE MACARONI
9	447208	SCREEN, SPAGHETTI
10	447222	SCREEN, RIGATONI
11	447234	SCREEN, TAGLIATELLE
12	447246	SCREEN, LASAGNE

KENWOOD MIXER ATTACHMENTS



A938 SPICE MILL

1	567852	LID JAR
2	567802	BEARING HOUSING & BLADE ASSY
3	600460	SPRING
4	567838	LIQUIDISER BASE
5	567840	JAR
6	567797	SEAL
*	567814	BLADE UPPER
*	567826	BLADE LOWER
*	492100	DOMED NUT
*	600472	SPINDLE ASSY



A978 CAN OPENER

1		175233	DRIVE WHEEL SPINDLE
2		173338	HANDLE ASSY
3		354645	COVER
4		354669	BODY ASSY
5		173273	HANDLE BRACKET
6	#	173352	INNER LINK PIN
7	#	173261	OPERATING LINK
8	#	261874	LOCKNUT 1/4" BSF
9		N.L.A.	SCREW, MUSH REC NO.8 X 9.5
10		N.L.A.	SPECIAL WASHER
11	#	173285	GUIDE BRACKET, RIGHT HAND
12	#	173302	WHEEL SUPPORT
13	#	175207	MAGNET SUPPORT BRACKET
14		175192	MAGNET ASSY
15	#	186684	CAN SUPPORT ASSY
16	#	173376	CUTTER WHEEL PIVOT SCREW
17		173390	CUTTER WHEEL
18	#	204656	SHIM WASHER
19	#	173297	GUIDE BRACKET, LEFT HAND
20		173388	DRIVING WHEEL
21	#	199954	LOCKNUT 5/8" WHIT.
22	#	173364	OUTER LINK PIN
23		354657	SPINDLE HOUSING
24	#	203963	WASHER SPRING

KENWOOD MIXER ATTACHMENTS

A978 Can Opener

Dismantle:

1. Unscrew and remove handle.

2. Insert a knife blade, steel rule or any similar flat instrument down the back of the cover so that the square projection on the cover is freed from the retaining hole. Remove cover exposing the link pins.

3. Press out the three link pins. The links and supports, etc., can now be removed.

4. Remove the cutter wheel with a 1/4" BSF box spanner and screwdriver.

5. Remove driving wheel by placing the driving tongue of the spindle into protected vice jaws and unscrew the driving wheel using a pair of pliers with the jaws protected with cloth.

6. Loosen 5/8" WHIT spindle locknut and unscrew spindle from body.

Assemble:

1. Assemble the cutter wheel by screwing the pivot screw home. Unscrew half a turn to make the cutter free but not loose.

2. Replace magnet support bracket, if fitted, and secure with the locknut. Check cutter is still free, and lock thread with Casco Metal Lock.

3. Use a 1/4" diameter rod to assemble the attachment. Insert the rod through the upper vertical slot on the right hand side of the body, add guide bracket R/H and enter the rod through the upper hole. Position the wheel support, continuing to push the rod through both upper holes, add the L/H guide bracket and push the rod through.
The assembly is now ready to take the first outer link pin. This is pushed in, withdrawing the rod at the same time.

4. Use the rod to line up the lower holes in the guide brackets and wheel support, with the curved slot in the body and withdraw the rod. Take up handle bracket and insert inner link pin through the lower pair of holes. Place an operating link on either side of the handle bracket and locate on the inner link pin. Offer this sub-assembly to the main assembly, bring the lower holes of the links in line with the previously aligned holes in the wheel support and guide brackets, the second long pin can be inserted through the curved slots in the body.

5. Still using the rod, bring in line the upper holes in the handle bracket with the upper holes in the body and insert the third long pin.

Assembling Spindle Housing, Spindle and Drive Wheel to Body

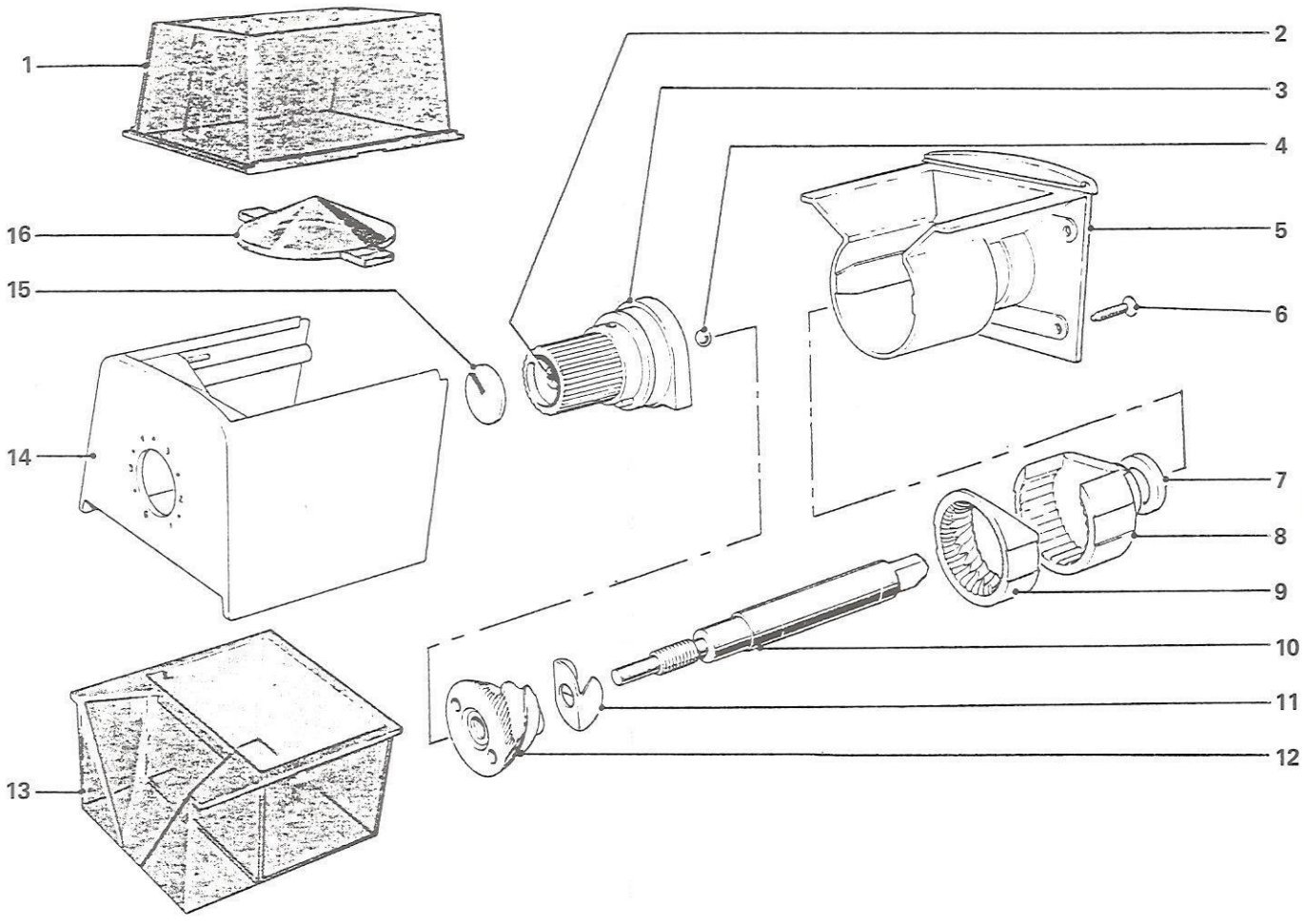
1. Screw the locknut to the Spindle Housing and screw the assembly into the Body.

2. Place spring washer onto spindle and insert the spindle into the spindle housing. Hold the spindle tongue in protected vice jaws and replace the driving wheel using pliers protected by cloth.

3. Screw in handle and pull down, bringing cutter wheel into working position. The gap between the cutting and driving wheel should be adjusted to 0.15 to 0.25mm (0.006-0.010"). This is carried out by rotating the spindle housing in or out to obtain the correct gap.

4. Tighten the locknut, and re-check the gap. If incorrect, repeat the adjustment procedure.

5. Remove handle, replace cover and secure handle with Casco Metal Lock.



A979 COFFEE GRINDER

1		195063	TOP CONTAINER
2	#	234417	SCREW PAN NO. 4 X 16
3		212768	ADJUSTING KNOB ASSY BLUE
		600874	ADJUSTING KNOB ASSY BURGUNDY
4		221757	BALL BEARING
5		453051	REAR HALF HOUSING & BEARING ASSY
6	#	206185	SCREW CSK REC NO. 6 X 16
7	#	222672	WASHER FELT
8		460731	FEED HOUSING
9		453087	STATIONARY GRINDER
10		195099	DRIVING SHAFT
11		172918	FEEDING BLADE
12		453075	ROTARY GRINDER
13		195051	BOTTOM CONTAINER
14		195104	FRONT HALF HOUSING
15	#	195116	KNOB COVER PLATE
16		195075	GUARD

A979 Coffee Grinder

Dismantle

1. Slide bottom container out of the front half housing.

2. Remove four screws and withdraw rear half housing complete with rotary and stationary grinders. Retain the ball bearing from the adjusting knob assembly.

3. Slide off top container and remove guard.

4. Remove adjusting knob assembly taking care not to lose the ball bearing.

5. Remove rotary grinder assembly from the rear half housing. Put tongue of drive shaft into protected vice jaws and unscrew rotary grinder.

6. Remove stationary grinder feed housing and felt washer from rear half housing.

Assemble

1. Replace felt washer and stationary grinder feed housing into rear half housing.

2. Replace rotary grinder onto the driving shaft and insert into the stationary grinder.

3. Invert the top container and locate the guard into its slots. Invert the front half housing and slide it onto the top container with the moulded impressions to the front.

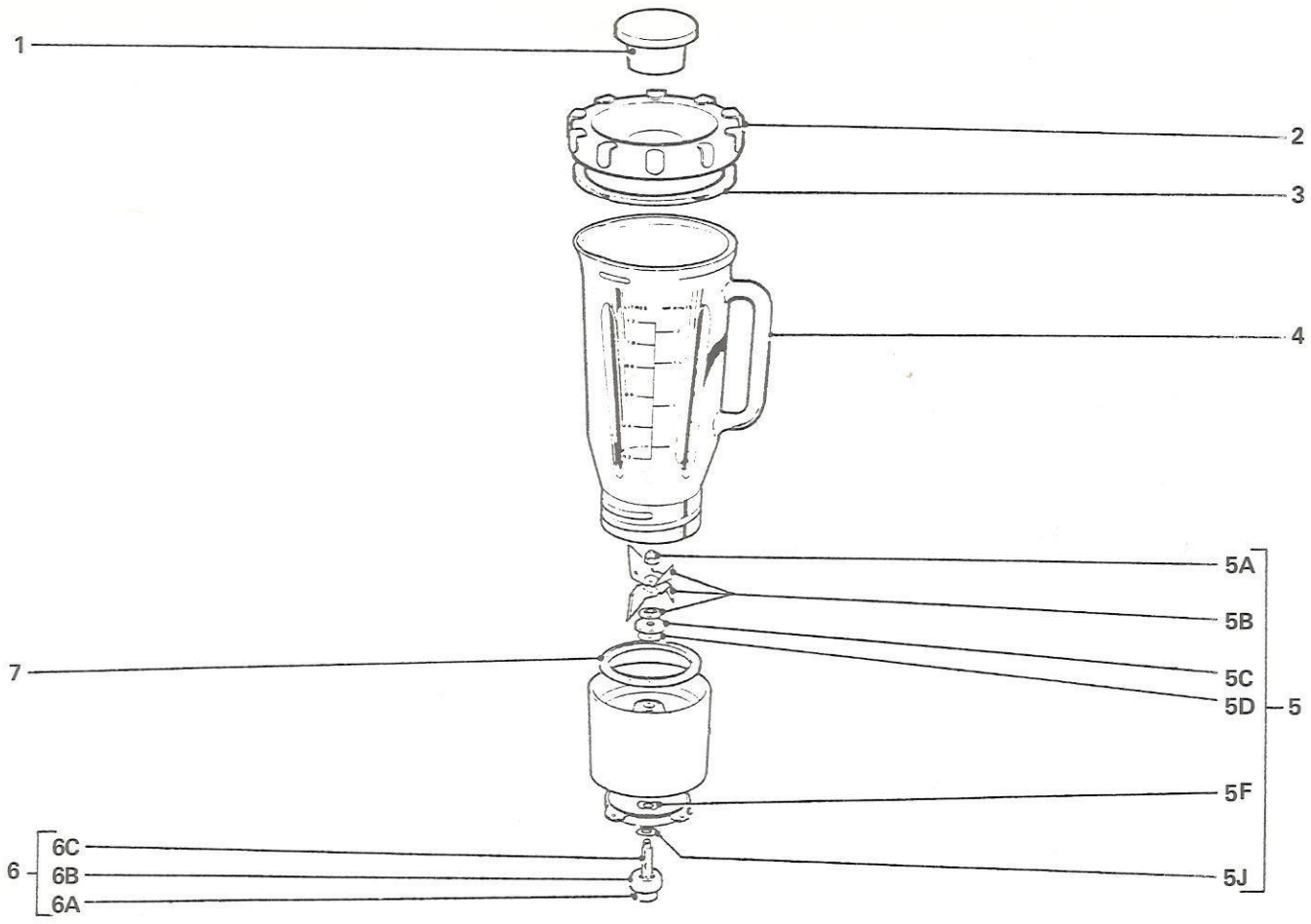
4. Replace the adjusting knob assembly complete with the ball bearing and secure the two half housings with the four screws.

Adjustment of Grinding Faces

1. Set knob to position 1 and remove the knob cover plate with a pointed tool.

2. Turn the exposed adjusting screw until the rotary and stationary grinders are just touching.

3. Replace knob cover plate (push fit) and the bottom container.



A989 LIQUIDISER (ACRYLIC) A990 1IQUIDISER (GLASS)

1		221496	FILLER CAP ASSY, WHITE
2		354592	GOBLET LID, WHITE
3		354607	LID GASKET
4		370845	ACRYLIC GOBLET (PACKED) (A989)
		370833	GLASS GOBLET (PACKED) (A990)
5		354619	BASE ASSY COMPLETE, WHITED (PACKED)
	#	445664	BASE ASSY COMPLETE, YELLOW (PACKED)
5A		492100	DOME NUT
5B		404763	LIQUIDISER BLADE KIT
5C		338249	SPINDLE CAP
5D		203365	WASHER FIBRE
5F		204113	CRINKLE WASHER
5J		204321	THRUST WASHER
6		355223	SPINDLE & COUPLING ASSY
6A		355182	DRIVE COUPLING ASSY
6B		233932	CUP WASHER
6C		492112	SPINDLE
7		178613	SEALING RING

A989 and A990 Liquidisers

Dismantle

1. Remove goblet and inspect the sealing ring. If it is damaged or hardened it must be replaced.

2. Hold the coupling assembly firmly and unscrew the domed nut clockwise (left hand thread). Lift off the blade assembly, cup washer and fibre washer.

3. Check the bearings for excessive sideways movement of the spindle in the base assembly. If the movement is excessive then replacement of the complete base and bearing assembly is required.

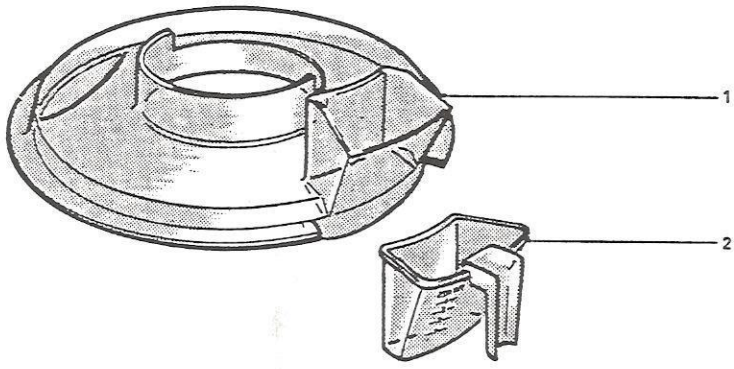
Assemble

1. Clean all components, lightly grease the spindle and assemble in the following order:

a. Spindle and coupling assembly.
b. Thrust washer (used to prevent end float).
c. Crinkle washer.
d. Base and bearing assembly.
e. Fibre washer.
f. Spindle cap.
g. Liquidiser blade kit.
h. Domed nut.

2. Tighten the domed nut to a torque of 2.8-3.4 Nm (25-30 lbf-ins).

3. Replace sealing ring and goblet.



A27215 Splashguard and measure

IT	TDA	DESCRIPTION
*	444347	SPLASHGUARD & MEASURE (PACKED)
*	453271	INSTRUCTION LEAFLET
01	*	SPLASHGUARD (NOT AVAILABLE SEPARATELY)
02	442090	MEASURE

KENWOOD

A THORN EMI company

SERVICE INFORMATION KSL 246 16 July 1987

Amendment to Kenwood Service Manual

Issue 2 to Sections One, Two, Three Four and Five has been published. Holders of the Export "Blue Blind" manual and the UK plastic manual should complete the following amendments.

Section One

Remove pages 5,7,9,11,13,15,17,and 19.
Insert pages 5,7,9,11,13,15,17, and 19 of Issue 2.

Section Two

Remove pages 5,7,9,11,13,15,17,19,21,23,25,27,29 and 31.
Insert pages 5,7,9,11,13,15,17,19,21,23,25,27,29 and 31 of Issue 2.

Section Three

Remove pages 7,9,11,13,15,17,19 and 21.
Insert pages 7,9,11,13,15,17,19 and 21 of Issue 2.

Section Four

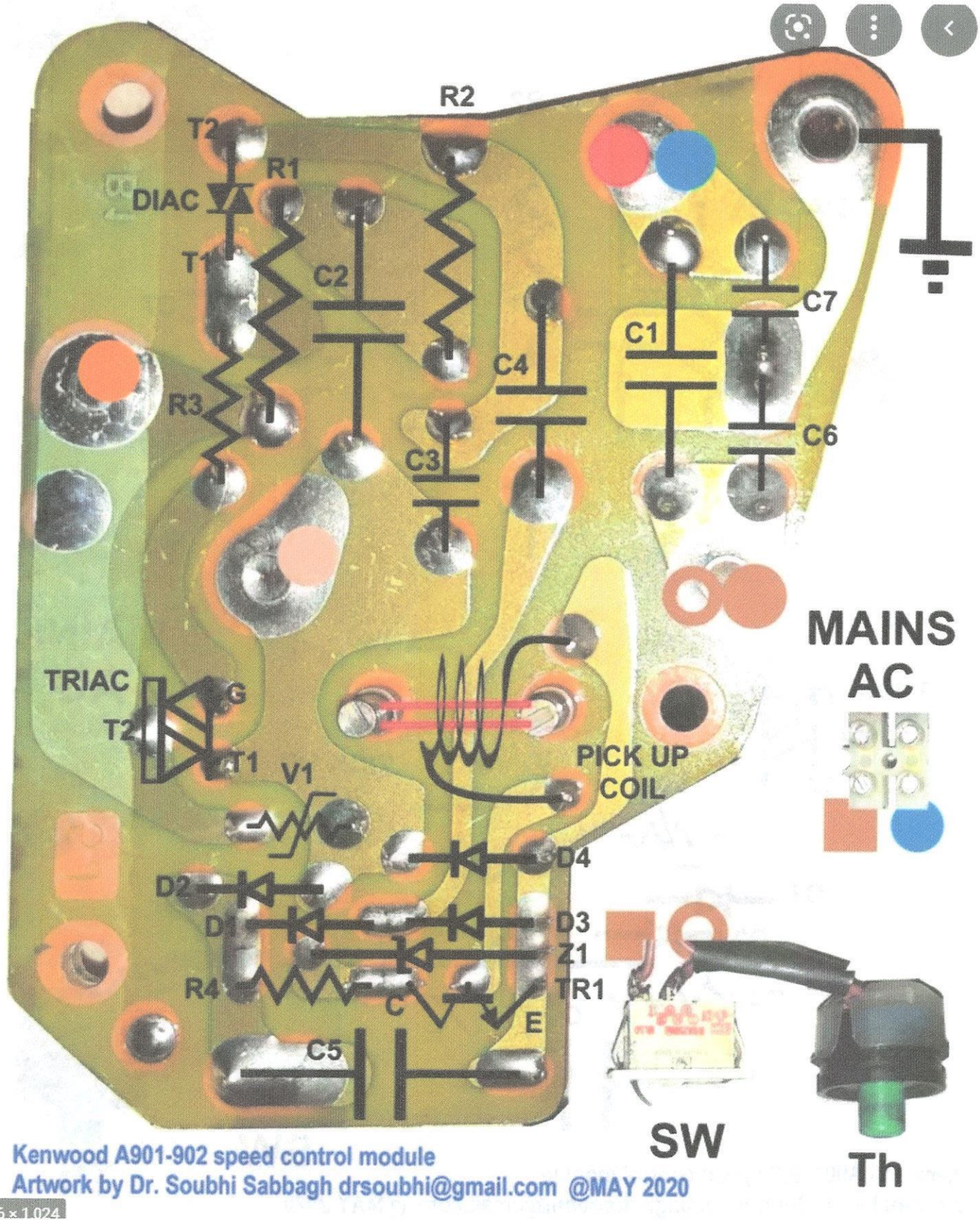
Remove pages 7,9,11,13,15,17, and 19.
Insert pages 7,9,11,13,15,17 and 19 of Issue 2.

Section Five

Remove pages 1,3,7,9,11,13,15,17,19,21,23,25,29,31,33 and 35
Insert pages 1,3,7,9,11,13,15,17,19,21,23,25,29,31,33 and 35 of Issue2.

Record these amendments on Page (II) of Section One. Discard the original pages.

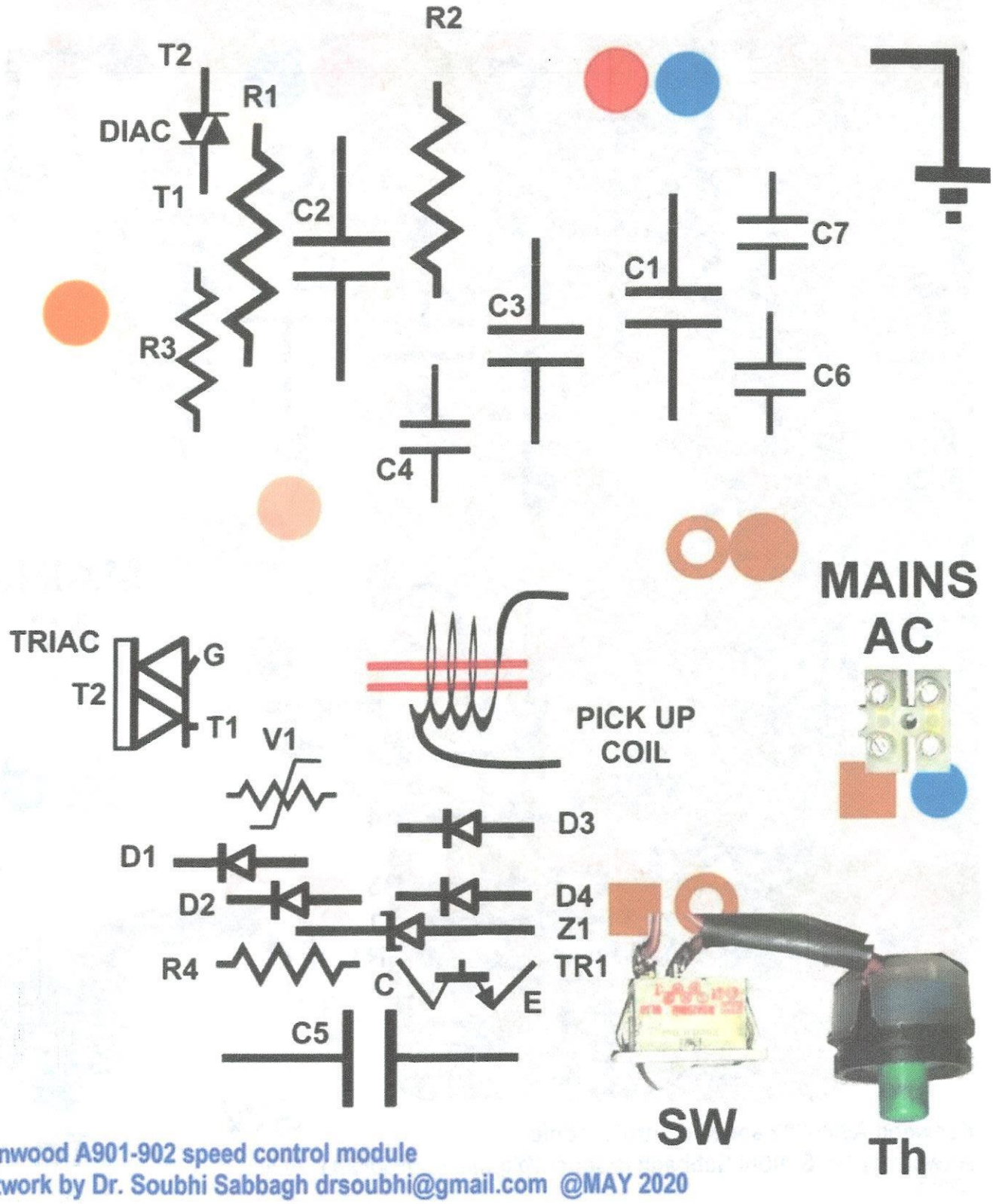
J Whitworth
Field Service Supervisor



Kenwood A901-902 speed control module

Artwork by Dr. Soubhi Sabbagh drsoubhi@gmail.com @MAY 2020

826 x 1,024



Kenwood A901-902 speed control module

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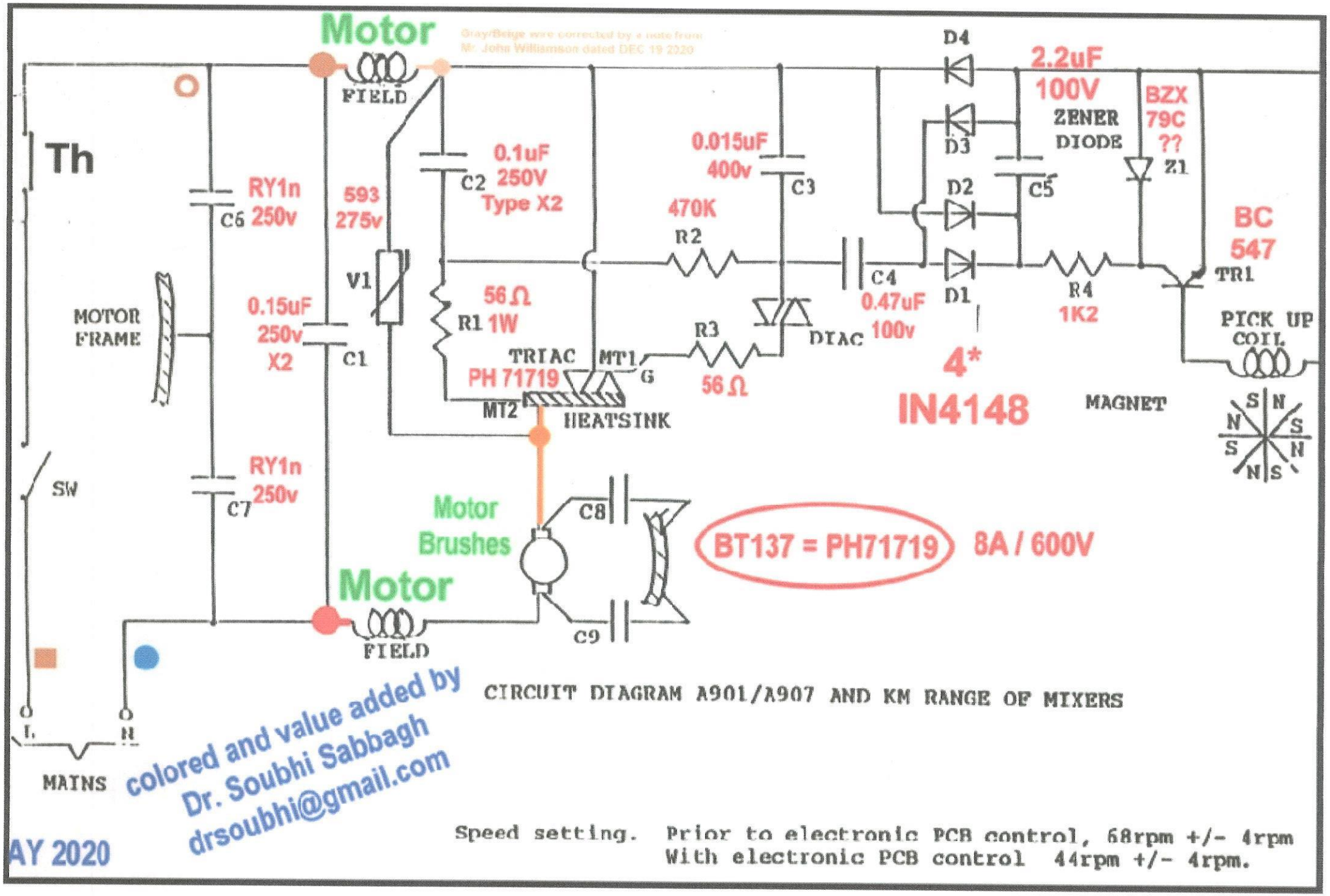
Motor
Gray/Beige wire corrected by a note from Mr. John Williamson dated DEC 19 2020
FIELD
Th
RY1n
C6 250v
593
275v
0.1uF
C2 250V
Type X2
0.015uF
400v
C3
470K
R2
D4
2.2uF
100V
ZENER
DIODE
BZX
79C
??
Z1
D3
D2
C5
BC
547
TR1
C4
0.47uF
100v
D1
R4
1K2
MOTOR
FRAME
V1
0.15uF
250v
X2
C1
56Ω
R1 1W
TRIAC
PH 71719
MT1
G
MT2
HEATSINK
R3
56Ω
DIAC
4*
IN4148
PICK UP
COIL
MAGNET
SW
RY1n
250v
C7
Motor
Brushes
C8
BT137 = PH71719
8A / 600V
Motor
FIELD
C9
L
N
MAINS
CIRCUIT DIAGRAM A901/A907 AND KM RANGE OF MIXERS
colored and value added by
Dr. Soubhi Sabbagh
drsoubhi@gmail.com
AY 2020
Speed setting. Prior to electronic PCB control, 68rpm +/- 4rpm
With electronic PCB control 44rpm +/- 4rpm.